

| GAM RNA SEQUENCE | | VALIDATION METHOD | SIGNAL | BACKGROUND | MISMATCH |
|-------------------------|------------------------|-------------------|-----------|------------|----------|
| GAM RNA | | | | | |
| Z-SCORE | Z-SCORE | SEQ-ID | | | |
| ===== | ===== | ===== | ===== | ===== | ===== |
| ACTCACTGCAACCTCCACCTCC | Mir_sequencing | | | 50 | |
| ACTGCACTCCAGCCTGGGCTAC | Mir_sequencing | | | 262 | |
| AATCACTTGAACCCAAGAAAGTG | Mir_sequencing | | | 259 | |
| AATCGCTTGAACCCAGGAAGTG | Mir_sequencing | | | 157 | |
| TTCAAGTGTAAAGTTCTGCTT | Mir_sequencing | | | 38 | |
| AGGCAGAGAGGACCAAGAGACT | Mir_sequencing | | | 54 | |
| CACTGCACTCCAGCCCCAGCAA | Mir_sequencing | | | 283 | |
| CCCGGGTGGAGCCTGGGCTGTG | Mir_sequencing | | | 73 | |
| GGGCGTGGAGCTGGAATGATGT | Mir_sequencing | | | 214 | |
| TGATAGATCCATATTTGGTAA | Mir_sequencing | | | 235 | |
| AGCAAGACCAGGGTTTGTGTT | Mir_sequencing | | | 52 | |
| TCACTGCAACCTCCACCTCCCA | Mir_sequencing | | | 120 | |
| ATTGTTGCCATGTTTATT | Mir_sequencing | | | 172 | |
| CTGGACTGAGCTCCTTGAGGCC | Mir_sequencing | | | 326 | |
| AGGCCAAGAAGGAAGCAGAGG | Mir_sequencing | | | 166 | |
| ATTAGGAGAGTGGGTGCTAAGT | Mir_sequencing | | | 171 | |
| AGTTTGTGTAAGAAAAGC | Mir_sequencing | | | 152 | |
| AGGAAAAAAATTAATGTGAGTC | Mir_sequencing | | | 268 | |
| TCACTGCAACCTCCACCAGCCT | Mir_sequencing | | | 119 | |
| GTGACAGTGAATCTAGACAGAC | Mir_sequencing | | | 218 | |
| TATTCATTGCCATGTTGTGA | Mir_sequencing | | | 21 | |
| TGGGTTTGTGTTGACAGTGTA | Mir_sequencing | | | 370 | |
| CTCAGCTCATCCACTAAATCCC | Mir_sequencing | | | 80 | |
| TCACTGCAACCTCCACCTTCAG | Mir_sequencing | | | 22 | |
| GGGAAATAATTAAATGTGAAGTC | Mir_sequencing | | | 10 | |
| TGGAGGAGAGTTGTCAGTATAG | Mir_sequencing | | | 248 | |
| GGAATGGTGGTTGTATGGTG | Mir_sequencing | | | 5 | |
| TCACTGCAACCTCCACCTCCG | Mir_sequencing | | | 121 | |
| TTCTGATGGTTAACGTTCTGTCA | Mir_sequencing | | | 39 | |
| AGGGCAGGAGGTCCGTCCCTC | Mir_sequencing | | | 271 | |
| TCACTGCAACCTCCACCACGTG | Mir_sequencing | | | 118 | |
| TCTAAGAGAAAGGAAGTTCAGA | Mir_sequencing | | | 230 | |
| GAAGTTGAAGCCTGTTCA | Mir_sequencing | | | 306 | |
| CTAGACTGAAGCTCCTTGAGGA | Mir_sequencing | | | 296 | |
| AATTGCTTGAACCCAGGAAGTGG | Mir_sequencing | | | 260 | |
| CACTGCAACCTCCACCTCCTGG | Chip strong, Sequenced | 31393 | 19.150194 | 22.611071 | 173 |
| TCACTGCAACCTCCACCTCCG | Chip strong, Sequenced | 31810 | 20.186802 | 16.772465 | 352 |
| TCACTGCAACCTCCACCTCCTG | Chip strong, Sequenced | 45662 | 20.504339 | 18.911047 | 353 |
| ATGGTAGCTGTCCACATCAGGA | Chip strong | 8208 | 25.85717 | 21.352978 | 276 |
| TCAGCTCCTACCCGGCCCCAG | Chip strong | 8279.5 | 11.228731 | 17.399603 | 354 |
| GTTTCTCTGGCTTGGCAT | Chip strong | 8298 | 10.689093 | 5.6611276 | 18 |
| TGGTCTGGCCCACATGGTC | Chip strong | 8349 | 13.022524 | 4.8629713 | 371 |
| GACCTTGTGATCCACCCGCCCT | Chip strong | 8371 | 11.550721 | 15.977306 | 3662 |
| ACTGTACTCCAGCCTGGAGAC | Chip strong | 8375 | 6.4653163 | 21.671926 | 1464 |
| TGCCAGGCTGGAGTACAGTGG | Chip strong | 8395.5 | 13.998208 | 16.034225 | 4337 |
| TAGCCCTCTCCACCTCGCCC | Chip strong | 8140 | 13.836067 | 2.9828069 | 7225 |

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|-------------------------|-------------|--------|-----------|-----------|------|
| CCCCGAGGCTGGAGTGCAGTGG | Chip strong | 8152 | 11.888549 | 9.8740635 | 3643 |
| GTGCTGGTGCCTCGCTCTGG | Chip strong | 8165 | 11.725875 | 9.7062302 | 221 |
| TGGAGTTGGCCGCCGGACCGA | Chip strong | 8187 | 7.0123053 | 19.997877 | 4167 |
| CTCAGGTGATCCACCCCTCTG | Chip strong | 8190 | 8.7424583 | 3.9819176 | 297 |
| TGGGCGACAGAGCAAGACTCCG | Chip strong | 8120.5 | 7.6260972 | 20.824087 | 2657 |
| TGCCATCTCCTGGTCACTGGT | Chip strong | 8099 | 7.1156712 | 11.071413 | 1111 |
| TGCAGGTTGCTGGTCTGATCTC | Chip strong | 8079 | 24.743416 | 17.869699 | 238 |
| CACAGTGGTCCCCGAAGCCCCT | Chip strong | 8036 | 13.676201 | 5.1438456 | 6024 |
| GCTGCCTTGCCCTTCCCATA | Chip strong | 8045 | 13.299488 | 9.9672127 | 2676 |
| TGCAATCCCCGCCTAACAGGA | Chip strong | 7725 | 6.5569119 | 20.462164 | 2246 |
| CCTCGGCTGGGCCTGGCCACT | Chip strong | 7735 | 6.1994433 | 14.162719 | 3683 |
| GACCTTGTGATCTGCCTGCCTT | Chip strong | 7752 | 27.998966 | 17.072956 | 2780 |
| GACCTTGTGATCCGCCCCGCTT | Chip strong | 7757.5 | 11.425945 | 12.53443 | 5539 |
| AGTCATTATCTCCTGGACC | Chip strong | 7790 | 10.371323 | 17.396904 | 167 |
| CAGCCCTCCTACCCCTGCCAGGC | Chip strong | 7825 | 9.6958656 | 6.1267514 | 2097 |
| CCCGGGTTGTCCCGCGCTCCGG | Chip strong | 7828 | 9.6190052 | 4.963129 | 8125 |
| GCTGCACCCCCAGCCTGGGTAAC | Chip strong | 7858 | 6.2366548 | 20.271864 | 100 |
| GCTGACCCCTACAGGTTGTGTT | Chip strong | 7867 | 6.2393546 | 19.308796 | 2817 |
| AGCACCTCCAGAGCCTGAAGCT | Chip strong | 7872 | 6.2408533 | 20.331314 | 3200 |
| CACTCCCTTCTCTGCTCATGG | Chip strong | 7886.5 | 8.1030474 | 7.7415953 | 64 |
| TGCTGGCTATCCTGCGCCTTC | Chip strong | 7903 | 10.469044 | 13.746831 | 130 |
| GGCTGCTGGTTCTGTGTTTAG | Chip strong | 7926 | 12.94939 | 11.212504 | 344 |
| CTTCCTGCCTCTGCCGCCGC | Chip strong | 7982 | 10.846725 | 2.7860351 | 197 |
| GGAAGCTCTGCCTAGATTCAG | Chip strong | 7993 | 8.3658886 | 4.2364674 | 7707 |
| AGGAGGCCCTGGCGTTT | Chip strong | 7670 | 9.8578186 | 18.796598 | 5900 |
| TGTTTGTGTGGGCCTTGGC | Chip strong | 7702 | 6.3522415 | 7.8300943 | 2593 |
| TGAGCACATGCCAGCCCTCTC | Chip strong | 7638 | 17.835676 | 6.0798554 | 711 |
| AAAGTGCTCCTTTAGAGGCT | Chip strong | 7504 | 6.1279302 | 9.924984 | 7587 |
| CTGCTCTGGTTCCCTCTGTC | Chip strong | 7506.5 | 7.7015729 | 15.622507 | 195 |
| CAGGCTGGAGTGCAGTGGCGCT | Chip strong | 7523 | 15.30444 | 19.097713 | 3187 |
| GCCTCCAGGTGGCTTTCTCT | Chip strong | 7529 | 13.077046 | 6.7496343 | 204 |
| CTGTGCTCCCTCTGGCGCCCCG | Chip strong | 7554.5 | 6.8389502 | 13.825434 | 5746 |
| CCCTCTGGCTTCTATCCCACC | Chip strong | 7596 | 7.1978688 | 6.3785648 | 315 |
| CACTGCACTCCAGCTGGGTGAC | Chip strong | 7458.5 | 7.5623012 | 16.072519 | 4318 |
| CCTGGGCCTCTAAAGTGGCTGG | Chip strong | 7478 | 6.5816064 | 16.968868 | 7243 |
| ATGCCACTGCACTTCAGCTTGG | Chip strong | 7484.5 | 6.5842552 | 19.414671 | 1141 |
| CAATTCCCAGCTGCCGGCTGC | Chip strong | 7442 | 8.735631 | 7.0616617 | 4520 |
| TCCCCCAGGCTGGAGTGCAGTG | Chip strong | 7443 | 15.029393 | 17.058321 | 1212 |
| CAGCTGGTGCTTGCCTGGCTAA | Chip strong | 7373 | 13.676201 | 7.9258513 | 66 |
| TCTCCCAGATCCTTAGCCTCC | Chip strong | 7384.5 | 14.663905 | 2.166656 | 232 |
| TTTCTTGGGCCGTGTGCTGGT | Chip strong | 7386 | 8.0159159 | 10.662634 | 380 |
| AGGCTGGAGTGCAGTGGGTGTA | Chip strong | 7407.5 | 15.261675 | 13.995954 | 6162 |
| CGCCCCGGACGTCTGACCAAAC | Chip strong | 7410 | 6.9984522 | 2.8285146 | 3322 |
| AGTGGCTTGTCCGTATGGCA | Chip strong | 7335 | 6.074203 | 16.269117 | 3712 |
| ATCACTTGAGTCCAGGAGTTT | Chip strong | 7335 | 6.5335536 | 19.718058 | 168 |
| ACCCTCTTGAGGGAAGCACTTT | Chip strong | 7337 | 6.0748458 | 18.790304 | 754 |
| CCGCCGCTGATAGCTCTGGGC | Chip strong | 7166 | 6.0192232 | 10.085858 | 6324 |
| TGACCTCATGATCCGCCACCT | Chip strong | 7185 | 29.981552 | 13.353135 | 3807 |
| CATCCCTCCCCCGAGCATGGC | Chip strong | 7187 | 6.026125 | 8.0810957 | 1480 |
| TGACCAGGCTGGAGTGCAGTGG | Chip strong | 7191 | 14.972094 | 17.484272 | 5379 |

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|-------------------------|-------------|--------|-----------|-----------|------|
| GTGATCTGCCAGCCTCAGCCTC | Chip strong | 7194 | 15.083432 | 9.3042612 | 6092 |
| TCAAGCCATTCTCCTGCC | Chip strong | 7209.5 | 8.1129141 | 18.200718 | 2230 |
| GAGCCGCCCTCACGATGTCCC | Chip strong | 7252 | 8.6663809 | 14.735928 | 89 |
| GCCTCCTGAGTAGCTGGATTG | Chip strong | 7261 | 10.548355 | 12.900331 | 7677 |
| GCCTGGTCCACCGCTCGCGCT | Chip strong | 7299 | 6.5360622 | 9.6849566 | 649 |
| CCGCGGGGTCATGGCTGGCCG | Chip strong | 7300.5 | 16.084072 | 5.0417223 | 1915 |
| CCTCACTCAGGTTGGACCTG | Chip strong | 7301 | 15.895414 | 5.3846102 | 181 |
| GGGTTACTCTGTGTTGGTCAGG | Chip strong | 7310 | 8.6937799 | 12.815997 | 13 |
| TGGATTCACACCATTCTCCTGC | Chip strong | 7131.5 | 8.6853085 | 6.5294394 | 4554 |
| TCTCGATCTCCTGACCTTGTGA | Chip strong | 7138 | 10.617272 | 15.065091 | 7202 |
| AATGGGGTAGTGGGCAGCCTGG | Chip strong | 7138 | 14.468472 | 13.397085 | 4479 |
| GTTGGCCTTGAGGTGGTAGAGT | Chip strong | 7146.5 | 17.758888 | 9.6492624 | 4832 |
| TACTCTTTAGCCCCACAGAGA | Chip strong | 7108.5 | 14.535069 | 18.807434 | 1632 |
| TCTCTCCTCCGCGCCGCGC | Chip strong | 7111 | 6.0010505 | 12.012436 | 7928 |
| TTGCATTGGTTCTGCCTGGTA | Chip strong | 7111 | 6.8737931 | 11.158542 | 3496 |
| CACTGCAAGCTCCACCTCCGG | Chip strong | 7048 | 12.263177 | 14.099768 | 8123 |
| CACTGCAAGCTCCGCGCTGGG | Chip strong | 7054.5 | 14.676391 | 11.85893 | 7080 |
| TGCTCTGATTTTGGCCCCAGC | Chip strong | 7060.5 | 10.413313 | 7.7476549 | 243 |
| GCTGTTTCCCAGCTGGTCA | Chip strong | 7061 | 19.803032 | 6.222959 | 338 |
| ACCTGTCTGCCTCCACCATCAA | Chip strong | 6789 | 17.796188 | 8.0814438 | 2784 |
| TCACTGCAAGCTCAGCCTCCG | Chip strong | 6757.5 | 12.953059 | 11.945885 | 4763 |
| CAGTTCCCTCCGCCAGCACTTC | Chip strong | 6955 | 6.4068542 | 9.6022158 | 577 |
| GCTAGGCTGCTGCCACTGAGG | Chip strong | 6972.5 | 13.127683 | 19.686853 | 337 |
| TGCTTGCTGTGGTTGGCTGGTA | Chip strong | 6974 | 21.75724 | 11.332961 | 34 |
| TCAGCCTCCTCCACCCAGAGT | Chip strong | 6996.5 | 14.03341 | 7.0927162 | 228 |
| TGAACCTCTGACCTCATGATCC | Chip strong | 6999.5 | 26.17539 | 18.849899 | 6822 |
| GGGGAACCGCGCTGGCCCGGCC | Chip strong | 7005 | 6.2445078 | 11.806351 | 11 |
| GGGCGGATCACCTGAGGTCAAG | Chip strong | 7018 | 13.621652 | 16.918211 | 5010 |
| TCACCCAGGCTGGAGTCAGTG | Chip strong | 6851 | 14.545588 | 17.889225 | 1970 |
| CTCTGTGATATGGTTGTAATA | Chip strong | 6862 | 19.265455 | 13.692534 | 193 |
| CATTCTGTGAGCTGCTGGCTT | Chip strong | 6884 | 11.220102 | 9.6062307 | 286 |
| CTCGACTTCCCTGGCTTGCCTGA | Chip strong | 6890 | 6.5380254 | 11.584653 | 191 |
| ACGCCTGTAATCCCAGCACTTT | Chip strong | 6898 | 10.893064 | 18.948416 | 8025 |
| GGCGGCCAGGCGCTTGGAGAT | Chip strong | 6899.5 | 8.1672001 | 10.434432 | 341 |
| AGGAGAAAGCCAAGTTGTGAGCA | Chip strong | 6905.5 | 29.559206 | 20.101482 | 3039 |
| GACCTTGTGATCCCCCTGCCTT | Chip strong | 6915 | 8.0644264 | 17.640575 | 6819 |
| TGCCGCCGGCCATCTCGCTC | Chip strong | 6915.5 | 13.391404 | 5.9536037 | 365 |
| CCGGGTTGAGGTTCCCATAGAT | Chip strong | 6920 | 8.8808632 | 18.126587 | 5678 |
| TCTCTATGCCATGCTGGCCT | Chip strong | 6926 | 17.665062 | 2.5852687 | 127 |
| TGTGCTCTGACTTCTCCTGGT | Chip strong | 6627 | 12.68187 | 12.047 | 724 |
| TATCTATGTGCTCTGACCTCTC | Chip strong | 6670 | 9.7406015 | 7.9747272 | 6767 |
| TGCCCAAGGGTGGAGTCAGTGG | Chip strong | 6671.5 | 10.579865 | 17.748798 | 4831 |
| TGACCCCTATATCCTGTTCTT | Chip strong | 6691 | 8.4725876 | 5.4931335 | 2529 |
| ACATTCTCTGATTGGTGCCTCC | Chip strong | 6695 | 12.723179 | 6.4453721 | 46 |
| TGTCTCCTCGGCTGTCCAGCCA | Chip strong | 6736 | 7.7142167 | 5.3288264 | 4102 |
| CTGTGCTCTTCCACGGCCCCA | Chip strong | 6477.5 | 13.662484 | 9.3280506 | 328 |
| AAGGCCGCCCTTCATGCTCCT | Chip strong | 6358.5 | 9.1175785 | 8.5895061 | 256 |
| CACTGCACTCCATCCTGGAAA | Chip strong | 6397.5 | 6.6049953 | 18.619169 | 576 |
| GACCTCGTGTATCCGCCCTCCTT | Chip strong | 6551 | 25.696636 | 10.76053 | 4357 |
| CAGCAGCTCAGCCTCCTCCCA | Chip strong | 6588 | 11.002058 | 9.0820408 | 311 |

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|-------------------------|-------------|--------|-----------|-----------|------|
| CAGTTTGTCCCCATGGCCATGT | Chip strong | 6591.5 | 13.401958 | 5.2375259 | 312 |
| TCAGTCTGAACAGCCCCCTGT | Chip strong | 6402 | 12.333841 | 7.9963231 | 5636 |
| GGCTCCTGGCAATGTAACTTA | Chip strong | 6419 | 10.450499 | 5.440361 | 8071 |
| TGGAGCTGGTCTGGGGCA | Chip strong | 6426 | 15.46969 | 17.843594 | 35 |
| CCTGGTCGGCGTGGTGACGGCG | Chip strong | 6434.5 | 6.2044091 | 6.2762375 | 319 |
| GGCTCAATGCAACTCTGCCTC | Chip strong | 6445 | 11.169347 | 10.793466 | 7972 |
| CTCACTGCAAGCTCAGCCTCCC | Chip strong | 6344 | 18.492039 | 11.712019 | 5558 |
| ACATCTAGACTCTGCCCTCTT | Chip strong | 6310 | 10.886886 | 15.850095 | 6415 |
| GCCTGTAATCCCAGCACTTGT | Chip strong | 6291 | 12.232025 | 12.874677 | 2365 |
| GCTCTAGTAGGAATGTCCCTCT | Chip strong | 6301 | 15.744108 | 2.9028673 | 7554 |
| TGGTTTATGTGCTTAGGGTCT | Chip strong | 6123 | 11.820129 | 12.702522 | 4007 |
| ATGGTCACCTGGGAGCCTGCT | Chip strong | 6216.5 | 11.238097 | 13.497247 | 5908 |
| TCCTACGGTGGCCACAGTCCTGG | Chip strong | 6256 | 7.9984035 | 3.2358623 | 358 |
| GGCTCACTGCAAACGTGCCTC | Chip strong | 6270 | 10.347923 | 7.3339972 | 8073 |
| CGTTCACTCCCTGCCCCTCGG | Chip strong | 6280.5 | 7.0008011 | 9.7373304 | 295 |
| GGCCTCAGTGATGATGGGTTAAA | Chip strong | 6124 | 7.1093221 | 5.4322863 | 6336 |
| ACACTGATGTTGGCCCTGGTCA | Chip strong | 6128 | 7.7381911 | 9.9548664 | 701 |
| TGCCCTCTTCTGTACAGCTCC | Chip strong | 6133 | 11.844581 | 4.3130703 | 7415 |
| GCCTTCCCACCACCCGTCC | Chip strong | 6139 | 7.5813851 | 3.1351645 | 2305 |
| TGTCTGGCTTTCTCAGTTAGC | Chip strong | 6191 | 9.9906111 | 15.989508 | 373 |
| CCTGGGTTGGAGCCTGCAGAA | Chip strong | 6100 | 12.018191 | 10.198569 | 6893 |
| TGCCTCAAGCCCTCCACTGCAC | Chip strong | 6112 | 10.263255 | 7.5186887 | 3035 |
| TACAACCTCTGCCTCCCAAGTT | Chip strong | 6090 | 14.013508 | 12.263943 | 590 |
| TGCTGCACCCCTCTGCCTCCGGG | Chip strong | 6094.5 | 6.9428978 | 10.588869 | 245 |
| ACCCAGGCTGGAGTGCAGTGGC | Chip strong | 6072 | 13.885826 | 18.928474 | 1877 |
| GGCTGTGGAGCTGCAGAGTTGG | Chip strong | 5971 | 8.6334085 | 2.2149129 | 3959 |
| CACTGCACTCCAGCACTCCAGC | Chip strong | 6054.5 | 6.051445 | 10.920486 | 2141 |
| CCGGTGTCAAAGTCTGGTATG | Chip strong | 6055 | 6.6824059 | 12.060349 | 6593 |
| CTGGGTTGGGGTTACATGACTG | Chip strong | 6057.5 | 6.2405562 | 7.4004421 | 1420 |
| GCAGCATCCCCGGCCTCCACTGT | Chip strong | 5995 | 7.2606683 | 11.881517 | 92 |
| ACCATTGCCCTCTAGTGTCTGT | Chip strong | 6005.5 | 18.236116 | 9.1782494 | 8077 |
| TAGCCCAGGCTGGAGTGCAGGG | Chip strong | 6013 | 9.3222113 | 19.078527 | 3381 |
| CTAGCCCCTACTCCAAGTTGA | Chip strong | 6032.5 | 13.43356 | 13.731526 | 4197 |
| AGTGCAATGGCGTGATCTTGGC | Chip strong | 5951 | 8.6127348 | 17.549313 | 6917 |
| TGTGGTAGTCACGGCCCGCCAC | Chip strong | 5909.5 | 23.027369 | 15.816967 | 252 |
| CCCAGGCTGGAGTGCAGTGGCG | Chip strong | 5921 | 13.471205 | 18.407236 | 424 |
| TACGCCTGTAATCCCAGCACTT | Chip strong | 5888.5 | 12.35752 | 15.497684 | 4497 |
| CTTGCCTGCCCTGTGTCACTAAA | Chip strong | 5903.5 | 13.361271 | 3.0393276 | 198 |
| CACCCAGGTTGGAGTGCAGTGG | Chip strong | 5832 | 13.915822 | 17.475407 | 6704 |
| CCCCTCGCCTGCAGAGCACAGC | Chip strong | 5731 | 11.509651 | 11.332071 | 2761 |
| TTCACTGCTCTAGCCCTAATT | Chip strong | 5739 | 15.599205 | 7.8376389 | 376 |
| TCCATTGGCCTTTATCCTAGA | Chip strong | 5760 | 15.329782 | 8.1126537 | 357 |
| CCCAGGCTTTCTCTGCCCA | Chip strong | 5771 | 12.212635 | 10.303027 | 6847 |
| TGCTATGTTGCCCAAGGGTGGCC | Chip strong | 5818 | 7.5935292 | 5.3837776 | 1649 |
| TGCCTAGCCAAGTCCAGTATT | Chip strong | 5823 | 17.976177 | 16.478537 | 366 |
| TGCCTCCAACAGCCCCATCTAG | Chip strong | 5709 | 13.713832 | 8.2213135 | 6138 |
| CGGCATCCCCACTTCCCTCTGC | Chip strong | 5467 | 9.4591436 | 4.2301731 | 519 |
| TTCTGGCTTCTCCCAGGCGGCC | Chip strong | 5582 | 8.2352791 | 10.879703 | 377 |
| ATGGCCCTTTATCACAGCTCC | Chip strong | 5586.5 | 21.480997 | 6.3762493 | 61 |
| GGGCTTTCTGGCATGCTGCTC | Chip strong | 5611 | 13.084294 | 4.0039878 | 4365 |

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|--------------------------|-------------|--------|-----------|-----------|------|
| AACCCAGGCTGGAGTGCAGTGG | Chip strong | 5616 | 13.703417 | 16.740423 | 7687 |
| TCGTGATCTGTCCACCTCGGCC | Chip strong | 5621.5 | 23.653496 | 15.646881 | 5412 |
| CACCCCTCCAGCTCCGGGGCT | Chip strong | 5651.5 | 10.5429 | 4.3305707 | 5684 |
| CAGAGCTGGCTTCATGGGTGTG | Chip strong | 5653 | 6.236114 | 16.840534 | 5052 |
| GTCTTGTCCCAGCTCTGCCACT | Chip strong | 5667 | 6.9972954 | 10.289277 | 4644 |
| ACTGCACTCCATCCAGCCTGGC | Chip strong | 5668 | 7.6480083 | 10.938603 | 51 |
| ATGGCCGCCCTGTCCCTCCGCC | Chip strong | 5678.5 | 6.8652005 | 8.8366051 | 481 |
| TGCCTGCCAGCTGAGATATC | Chip strong | 5686 | 10.380668 | 15.221783 | 241 |
| GACCTTGTGATCCACCTGCCCT | Chip strong | 5568 | 12.58271 | 17.013798 | 7762 |
| GCCATCATATCCCCTGTGACCT | Chip strong | 5493 | 17.421993 | 9.6620798 | 4242 |
| GCTCGCTGGGTCTGCAGGCGG | Chip strong | 5502 | 7.7859778 | 10.874097 | 208 |
| GCCATTGCACTCCAGCCTAGGC | Chip strong | 5526 | 14.891936 | 17.393818 | 7055 |
| TCTTGCCACTTCATCCCCTTC | Chip strong | 5428 | 8.6937799 | 2.063446 | 1381 |
| CTCCTTGCCATTCTTTTC | Chip strong | 5430.5 | 13.120463 | 6.2777233 | 2834 |
| TTGCCTTCCTGCCAGCTTCTG | Chip strong | 5405 | 6.7744174 | 12.840696 | 3179 |
| TGCGACCCCTAGCCCCCTCACTT | Chip strong | 5417 | 11.129067 | 4.3243365 | 2317 |
| AGTGATCCACCCGCCTAACCT | Chip strong | 5364 | 8.4659891 | 7.8198662 | 3402 |
| GCAGCTCTGGAGGTGAGAGGCG | Chip strong | 5368 | 7.8018293 | 15.956004 | 201 |
| CTCATTGTAGCCTCCAGTTCTG | Chip strong | 5375 | 10.634505 | 9.6296253 | 325 |
| CCTCAAGTGCCTCTGCTGCT | Chip strong | 5375 | 12.938377 | 9.593914 | 3997 |
| CCAGGAGGTTGAGGCTGCAGTG | Chip strong | 5379 | 11.585869 | 13.504684 | 1956 |
| GTGGCGTGATCTGGCTCACTG | Chip strong | 5379.5 | 9.6190071 | 14.266473 | 2609 |
| CTCCCCAGCCCTGGTATTCTGA | Chip strong | 5384.5 | 8.2165499 | 5.6187172 | 5022 |
| ATGGCCCTAACATGAGTTGGTGTT | Chip strong | 5385.5 | 19.2614 | 5.6697388 | 7951 |
| AGGCTGGTTAGATTGTGGTCT | Chip strong | 5392 | 20.112637 | 16.324888 | 270 |
| TCTGCCTAGAAACAGTGTTC | Chip strong | 5275 | 11.601666 | 3.0926366 | 3939 |
| ACTGCACTCCAACCTGGGTGAC | Chip strong | 5289.5 | 9.2819481 | 17.745958 | 5884 |
| CACCAGGCTGGAGTGCAGTGGC | Chip strong | 5291 | 13.367915 | 17.112989 | 3975 |
| TGGTGGCTCACACCTGTAATCC | Chip strong | 5307 | 8.9909515 | 17.038876 | 5793 |
| GCTGCACTTCAGCCTGGGTGTC | Chip strong | 5310 | 7.5533419 | 15.940791 | 3 |
| GGCCTCTTATCTGGCTCCTGCA | Chip strong | 5318 | 6.4274201 | 6.5868769 | 1940 |
| GCCCTTGTGTCTGGCTGGGGT | Chip strong | 5320 | 11.978069 | 10.261797 | 96 |
| GGTCAGGAGCCCTGGCCCCCT | Chip strong | 5270 | 7.1600103 | 6.9067311 | 7119 |
| TTCTCTGTGCTGGTCCTGAGG | Chip strong | 5272.5 | 8.1261625 | 9.2259359 | 138 |
| TAGGACCCCTGGGGCCCCC | Chip strong | 5109 | 8.5892859 | 8.0437737 | 6795 |
| CAGCTCGGGCTCCCTCTCCCG | Chip strong | 5136 | 8.3545942 | 10.162696 | 2628 |
| AGATTTCCTTCCTGCTTGCT | Chip strong | 5251 | 6.0291886 | 13.065763 | 265 |
| TTTAGATTGTGACCTCCCCCA | Chip strong | 5251.5 | 10.399335 | 6.4590821 | 3408 |
| TGTACTTCACCTGGTCCACTAG | Chip strong | 5195 | 6.9524846 | 10.108624 | 1330 |
| GACCTCATGATCCACCTGCCTT | Chip strong | 5103 | 8.7762318 | 12.394208 | 6450 |
| CACTGCAATCTCCATCTCCTGG | Chip strong | 5091 | 10.483025 | 11.471234 | 2278 |
| GACCTCAGGTGATCTGC | Chip strong | 5069 | 10.007993 | 16.466791 | 5584 |
| TGCGTCCAGTTGCTGCCAGGC | Chip strong | 5079 | 11.194171 | 5.7294831 | 242 |
| CTGGCTAACATCCAAGAAAGGC | Chip strong | 5036 | 14.178236 | 6.6532001 | 85 |
| TCATTGCAACCTCCTCCTGGGT | Chip strong | 5039.5 | 18.95397 | 9.7537737 | 124 |
| CACCATGCCCGGCTAACCTGG | Chip strong | 5040 | 7.316802 | 9.882267 | 7207 |
| ACAGCCTCCATCTCCTGGGCT | Chip strong | 5043 | 8.2979441 | 10.987616 | 1959 |
| CTGCGTTCTGCCTGGCGGCCTA | Chip strong | 5047 | 6.173347 | 11.160098 | 3098 |
| TGCCTGTTGCCACCTGATAAA | Chip strong | 5059 | 6.6816697 | 2.6550572 | 2254 |
| TTGACATGCCTCCTACATGATC | Chip strong | 5065 | 12.953059 | 10.809283 | 40 |

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|-------------------------|-------------|--------|-----------|-----------|------|
| GGTGATCCACCAGCCTCGGCCT | Chip strong | 5029 | 8.9257526 | 7.78508 | 2526 |
| TGCTCGCCCCACATGCCCTCAT | Chip strong | 5021 | 8.3489428 | 2.7518404 | 399 |
| CCTGCTCTGTTCTTAAGCTT | Chip strong | 5021 | 9.0648565 | 7.4354005 | 291 |
| TGCACCACTGCACCCCCAGTCTG | Chip strong | 5009 | 7.3463378 | 16.848854 | 236 |
| CATTGGCCTTTATCCTAGAGG | Chip strong | 4983.5 | 15.452302 | 15.902376 | 7135 |
| TGCAGCCTGGCTCGCGCCTCC | Chip strong | 4949 | 8.0856781 | 6.7986131 | 6000 |
| TGCTGCCCTAAGACCACCTT | Chip strong | 4950 | 11.124713 | 13.249466 | 246 |
| ACCCAGGCTGGAGTGCAGTGGG | Chip strong | 4950 | 12.992976 | 17.386417 | 5465 |
| AACCAAGCCAGGCCAGCCTCTC | Chip strong | 4971 | 17.613102 | 15.532504 | 2994 |
| GGGAGTTGTGGTTGGCTCTGG | Chip strong | 4978 | 8.3206406 | 9.2158394 | 346 |
| GGCCGTGGTCGCTGACTCTCGT | Chip strong | 4980 | 6.9448657 | 12.094063 | 8 |
| CTGCCCTGGGGGGCCTCCTTGC | Chip strong | 4817 | 12.989676 | 3.0056505 | 6449 |
| TTGTTCCATCTGCCCTCCTGC | Chip strong | 4838.5 | 9.8048887 | 4.8166785 | 4212 |
| TAGGTATGGCTGTGGCACAGC | Chip strong | 4840 | 23.281979 | 15.36544 | 20 |
| CTGGGAGGCAGGAGGTTGCAGTG | Chip strong | 4850 | 10.57113 | 16.432323 | 2605 |
| TTCCCACTGTGGCAGAGCCTCG | Chip strong | 4853 | 8.5227718 | 8.7430191 | 1620 |
| CGTCCCGGGTTCACGCCATTCT | Chip strong | 4935 | 8.0834999 | 8.5963545 | 4319 |
| GGAGGTGGAGGTTGCAGTGAGC | Chip strong | 4936 | 10.584228 | 13.28014 | 5268 |
| GCGCCGCCATCCGCATCCTCGT | Chip strong | 4801 | 16.34218 | 9.281786 | 206 |
| TTGCTGCCCTCTCCCAGCTCCC | Chip strong | 4807 | 7.1600103 | 7.8129125 | 817 |
| GTCTCCTCCCTTCATTACCT | Chip strong | 4807 | 8.0566654 | 3.426122 | 6120 |
| CTGGTGGTTGGGTCTTGCTTTA | Chip strong | 4756 | 6.5764294 | 8.8639517 | 327 |
| ATGGGCCTCCTATTATCCCCAT | Chip strong | 4745.5 | 13.363207 | 5.1394033 | 170 |
| CGCCCAGGCTGGAGTGCAGTG | Chip strong | 4722 | 9.6376123 | 13.758563 | 293 |
| GCTCCGCCACGCCACTCCTAC | Chip strong | 4705 | 6.8716969 | 9.635397 | 1911 |
| ACTGAACCTCAGCCTGGGTGGC | Chip strong | 4658 | 6.5409584 | 16.232538 | 2571 |
| AAAAGCAATTGCGGGTTTGCC | Chip strong | 4663 | 15.116411 | 4.7130346 | 4774 |
| TGGCCTCGGCATCCAGCAAGAG | Chip strong | 4673 | 9.39785 | 4.3334913 | 1345 |
| TGTAATCCCAGCTACTCGGGAG | Chip strong | 4677 | 11.408354 | 16.218851 | 1981 |
| CAGGCTGGAGTGCAGTGGGCC | Chip strong | 4637 | 13.11445 | 16.865786 | 3960 |
| CCAGGAGGCGGAGGTTGCAGTG | Chip strong | 4649 | 12.224211 | 16.137344 | 5298 |
| GACCTTGTGATCCACCCGCTT | Chip strong | 4584 | 8.4290171 | 13.331941 | 3651 |
| CGACCTTGTGATCCTCCGCCT | Chip strong | 4594 | 7.4134154 | 4.4487605 | 77 |
| CGCACCCCACTGTCCCTCAACC | Chip strong | 4601.5 | 6.5281987 | 4.8853817 | 1477 |
| CCAGGAGTGGAGGCTGCAGTG | Chip strong | 4602 | 7.9332623 | 12.632589 | 2266 |
| CATCCCCTGATGCTTGTAGTA | Chip strong | 4569 | 15.521686 | 7.8696661 | 6712 |
| CTGGCTGGAGTGCAGGTGAGTG | Chip strong | 4570 | 6.2398477 | 8.3825598 | 5350 |
| TGACTACAAACCTCCACCTCCG | Chip strong | 4496 | 8.9163761 | 9.9170055 | 7983 |
| AGCCTGTCCCTCTCCTG | Chip strong | 4545 | 14.269382 | 3.7745585 | 4225 |
| GACCTCGTGATCCGCCCGCTT | Chip strong | 4513 | 8.2720776 | 14.007803 | 2307 |
| CTGAGGCTGGAGTGCAGTGGTG | Chip strong | 4514 | 12.474048 | 16.694977 | 1268 |
| TGATATGGTTGGCTGTGTT | Chip strong | 4515 | 12.488225 | 16.236593 | 3673 |
| CTCAGTGCAACCTCCGCCTACT | Chip strong | 4516 | 8.8905106 | 13.512998 | 189 |
| GGCTCTGGCTTGGAGGAGCAG | Chip strong | 4483.5 | 6.8781896 | 14.473881 | 106 |
| CTACTGGCCATCTGATCTACAA | Chip strong | 4485 | 7.3851671 | 14.238548 | 6220 |
| GGGTTTGGAAATGGTCTGT | Chip strong | 4463 | 9.6709318 | 2.0551727 | 215 |
| TCTGTGCCTGCTTCCCCACCCA | Chip strong | 4441 | 10.565875 | 6.8799772 | 3578 |
| CTCACAGTCTGCCCTTCCCTG | Chip strong | 4450.5 | 6.7386289 | 12.351869 | 5907 |
| AGTCGCTGGACCATCAGAGCCT | Chip strong | 4419 | 12.240126 | 13.100382 | 56 |
| CACTGCAAGCTGCCACCTGG | Chip strong | 4423 | 9.3773403 | 10.346853 | 6245 |

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|-------------------------|-------------|--------|-----------|-----------|------|
| GACCTCGTGATCTGCCAGCCTT | Chip strong | 4406.5 | 24.777288 | 14.546185 | 7856 |
| AGATGGGGTTTCATCATGTTGG | Chip strong | 4401.5 | 10.491898 | 11.499362 | 7635 |
| ATCACCCAGGCTGGAGTGCAGT | Chip strong | 4395.5 | 12.324327 | 14.314183 | 1236 |
| GGTGGTGGAGCGGGCCCAGGCC | Chip strong | 4320.5 | 7.4591732 | 12.328825 | 112 |
| GCCCAGATCTCCTGACCCTCAG | Chip strong | 4383 | 6.4070868 | 5.3791971 | 692 |
| AAGTGATTCAGCCCTCA | Chip strong | 4389 | 9.3773403 | 14.014197 | 3565 |
| TCACTGAAACCTCCACCTCTCG | Chip strong | 4339.5 | 9.3257465 | 9.4827623 | 1720 |
| AGGCGCCTGCGGGATCCTGCC | Chip strong | 4344 | 8.3828068 | 9.3085003 | 2425 |
| TGCGCCTGGGGCCCTGGCTGTC | Chip strong | 4313 | 6.5380034 | 7.0607853 | 574 |
| CACTAGGCTGGAGTGCAGTGGC | Chip strong | 4301 | 12.202009 | 16.549067 | 3466 |
| CGGCCCCCTCCTCGCGCC | Chip strong | 4246 | 7.6359258 | 11.74948 | 3562 |
| GCGGGGCCCGGACCCAGCCTCT | Chip strong | 4254 | 6.3321967 | 3.5057929 | 4136 |
| TCACCAGGCTGGAGTGCAGTGG | Chip strong | 4254.5 | 12.386087 | 16.169609 | 2239 |
| CCCAGGAGTTGGAGGCTGCAGT | Chip strong | 4273.5 | 6.2922449 | 14.155445 | 1496 |
| AAGGTGGAGGTTGCAGTGAGCT | Chip strong | 4275.5 | 9.1417122 | 11.853789 | 5181 |
| CACCCAGGCTGGAGTGCAGTGG | Chip strong | 4215 | 18.95397 | 16.455006 | 2323 |
| CTCTCCTAGTGTGCAGCGTGG | Chip strong | 4232 | 15.394135 | 7.1230512 | 5501 |
| TCCAGCTGTCCACGTCTCCTG | Chip strong | 4070 | 6.5770264 | 7.9605851 | 23 |
| GGAGCCGCCGCCCTTCATT | Chip strong | 4182 | 6.2263575 | 9.809968 | 2158 |
| CTCACTGCAAGCTCCACCTCTT | Chip strong | 4183.5 | 15.744108 | 13.408605 | 5871 |
| CCATCCCTTGGAAAGCTGGTTTA | Chip strong | 4197 | 11.864914 | 11.215641 | 4532 |
| TGTTTTGGTGGTCTATAGGAAA | Chip strong | 4197.5 | 17.069103 | 4.0587807 | 8111 |
| ATGGTACTCCAGCCTGGGTGAC | Chip strong | 4173 | 7.3957338 | 16.409479 | 275 |
| TATTCCAGCCGCTTGAGCTCGC | Chip strong | 4174 | 10.310376 | 2.8741286 | 2232 |
| TTGCCGCCGTCTGCTGCCCG | Chip strong | 4152.5 | 6.8889446 | 2.1733229 | 3795 |
| GTTGCCTAGGCTGGTCTGAAC | Chip strong | 4155 | 10.291553 | 9.7640581 | 3199 |
| GTGGCAGACCTCCCTCTCCT | Chip strong | 4139 | 6.9686718 | 8.4107714 | 2348 |
| ATTCTGTGCTAACTGCAGGCCA | Chip strong | 4140 | 19.305922 | 11.530575 | 153 |
| GACCTCGTGATCCGCCTGCTTT | Chip strong | 4080.5 | 7.6009617 | 13.947659 | 199 |
| TGGTGCAGCGTGTGGTGGCTCT | Chip strong | 4082.5 | 9.6208868 | 12.887189 | 251 |
| TGGTCGGGCTGCATCTCCGGC | Chip strong | 4093 | 8.0100813 | 2.1106353 | 132 |
| CACTGCAGCCTCCATCTCTGGG | Chip strong | 4050 | 6.9180322 | 10.574921 | 174 |
| GCGGGGTTCCGTGCCCGAGAGT | Chip strong | 4053 | 7.8508492 | 13.874727 | 6476 |
| ATGGTGCTGGTGGGAGTGTATT | Chip strong | 4053 | 18.971554 | 14.625937 | 277 |
| TGGCATGGAGTGGATGGCCCCA | Chip strong | 4020 | 10.765949 | 7.8047137 | 1023 |
| GTTGCCTAGGCTGGAGTGCAGT | Chip strong | 3942 | 8.7036104 | 9.8695612 | 4753 |
| GGAGTGCAGTGGCGTGATCTCG | Chip strong | 3942.5 | 10.745003 | 10.263955 | 5148 |
| CTTCTGGCTGGTCAAGGACT | Chip strong | 4005 | 8.6937799 | 9.6446276 | 2170 |
| CAGGCTGGAGTGCAGTGGGGCG | Chip strong | 4013 | 11.398844 | 15.757032 | 4495 |
| TGGCCCACCCGTTGA | Chip strong | 3982 | 17.579905 | 15.494586 | 2874 |
| CATCTTGGCCCATCCACTTCCA | Chip strong | 3944 | 14.688863 | 11.31537 | 1533 |
| CCTGCCAGAGCAGCTGTCCTC | Chip strong | 3950 | 8.0972605 | 6.3928571 | 1324 |
| GGAGGCGGAGGTTGCAGTGAGC | Chip strong | 3959.5 | 14.891936 | 13.769753 | 913 |
| TGCCTGCCGTTAAATGTTACTT | Chip strong | 3936 | 12.749383 | 11.509386 | 128 |
| TGGGCTTGGTTCTAGGTAGGT | Chip strong | 3911 | 7.6177769 | 7.7206488 | 6209 |
| AAGGGAATGTTGTGGCTGGTT | Chip strong | 3896 | 10.519875 | 13.251223 | 3929 |
| GTAGTCCCAGCTACCCGGAGG | Chip strong | 3868.5 | 12.13766 | 12.272501 | 5606 |
| AAGACACCAGTGGCAGCCCC | Chip strong | 3888.5 | 10.940197 | 2.9559026 | 4672 |
| CATGTTGGTGTGCTGCACCCGT | Chip strong | 3866 | 8.1607409 | 11.896873 | 4506 |
| GTGCTCCCTCCTCAAGGA | Chip strong | 3789 | 7.298171 | 9.6469736 | 4548 |

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|-------------------------|-------------|--------|-----------|-----------|------|
| GACCTTGTGATCCGCCCACTTT | Chip strong | 3834 | 7.5950313 | 9.0545225 | 88 |
| GGGCAGATCACCTGAGGTCAGG | Chip strong | 3840 | 11.253606 | 14.604554 | 6553 |
| TAGGCCCTCCCCTTGGGATA | Chip strong | 3843 | 11.037247 | 12.832376 | 4463 |
| CTGTGCTGGTCTTCTTTGA | Chip strong | 3805 | 10.533696 | 10.867439 | 941 |
| CACTCAGCTGAGCCCTCAGCCC | Chip strong | 3808 | 6.236114 | 7.0009232 | 5277 |
| ATTGCACTCCATCCTGGGCAAT | Chip strong | 3819 | 9.5150204 | 15.853324 | 6351 |
| CAACTCACTGCGGCCTAACCT | Chip strong | 3783 | 9.680912 | 5.8278494 | 279 |
| GCCGGGTTCAAGCCATTCTCCT | Chip strong | 3787 | 7.9569592 | 12.92104 | 1813 |
| GTTGAGGTGATGCCAGCCCTGC | Chip strong | 3770.5 | 12.133699 | 8.0446234 | 855 |
| TCCTTCAGCCTCCCAGCTAAA | Chip strong | 3775 | 7.1473608 | 4.387816 | 2067 |
| CTTTATGAAAACCTGAATTATG | Chip strong | 3768 | 23.111034 | 14.960108 | 2537 |
| TGGGGGAGCTCAGTCCAGCCC | Chip strong | 3738 | 7.3541789 | 13.35856 | 473 |
| CTGGAGGGAGCTGCCATG | Chip strong | 3669 | 12.842446 | 14.933422 | 84 |
| ATCTGAGCTCCGCCCTGTCA | Chip strong | 3672 | 6.5016451 | 12.313261 | 2840 |
| GAGGCGGAGGTTGCAGTGAGCT | Chip strong | 3764 | 9.5502567 | 13.02844 | 7730 |
| ACCTTCAGTGCCCTTCTGTC | Chip strong | 3716 | 8.0798817 | 7.0213175 | 1227 |
| GGAGTTGCCTATTGCTTTGG | Chip strong | 3720 | 6.173347 | 6.482801 | 2172 |
| GCCATCCCAAGCATTGG | Chip strong | 3676 | 17.232298 | 13.983404 | 2451 |
| CATGGTGAAACCCCGTCTC | Chip strong | 3678 | 7.6599259 | 10.599221 | 7513 |
| CTTGTATCTCTGTAGCCCTG | Chip strong | 3684 | 6.669796 | 8.3862486 | 1079 |
| CTCCCCCACAGTGTCTGCC | Chip strong | 3652 | 6.2223167 | 4.4124942 | 5838 |
| TAGCTCCTCCCAGATCTCATCT | Chip strong | 3659 | 10.385338 | 3.9473054 | 116 |
| TTAAAGCCTCCCTCATAAGGA | Chip strong | 3650 | 8.3206406 | 14.328845 | 7912 |
| TCGCACCATTGCACTCAGCCA | Chip strong | 3636 | 8.0997972 | 12.774747 | 5846 |
| TCACCGAGGCTGGAGTGCAGTG | Chip strong | 3619 | 11.230327 | 15.315854 | 3181 |
| GGACACGTGGCTGAAGGCGGCC | Chip strong | 3613 | 11.24597 | 5.512249 | 2730 |
| AAGCCAATGCTAGCCCACATGC | Chip strong | 3477 | 8.0798817 | 10.92757 | 3767 |
| CTTCCCACCAAAGCCCTGTTG | Chip strong | 3477.5 | 6.069356 | 7.7381773 | 5403 |
| TTGGGGGAGGCCTGCTGCCAT | Chip strong | 3549 | 9.3567915 | 8.3044834 | 41 |
| CTGAGCAGATGACCAGCCCCAG | Chip strong | 3552 | 7.8454118 | 5.6452436 | 2049 |
| CCTGGAGGCGGAGGTTGCAGTG | Chip strong | 3559.5 | 13.365788 | 12.004289 | 1221 |
| GCACCACTACACTCCAGCCTGG | Chip strong | 3563 | 6.3702331 | 11.491977 | 3344 |
| CACCGAGGCTGGAGTGCAGTGG | Chip strong | 3565 | 11.145717 | 13.107421 | 5363 |
| CCCATTCTTGAGTTCAGCTCT | Chip strong | 3582 | 13.552105 | 2.9659367 | 7453 |
| CCGGGCTGGAGTGCAATGGCTC | Chip strong | 3585.5 | 7.393702 | 15.612262 | 1102 |
| GCTGGCAAGGTGCTGGAGGGCC | Chip strong | 3498.5 | 14.638888 | 3.7599447 | 4202 |
| GTTGGTCTTCATTAAATGCTTT | Chip strong | 3499.5 | 17.153486 | 5.8892236 | 224 |
| GCTCCCACCGCCGCTATGGTA | Chip strong | 3502 | 8.3206406 | 3.5113876 | 7090 |
| GAGGGGAGCCCCCATCCTCCAG | Chip strong | 3509 | 6.0553408 | 8.2040138 | 7454 |
| GGTGGCTATGGCTGTGCTCGC | Chip strong | 3426.5 | 15.917648 | 2.9563422 | 217 |
| GCCAGCCAGAACGTCACACTG | Chip strong | 3409 | 16.32616 | 4.566371 | 1814 |
| AAGTGCTGGGATTACAGGCGTG | Chip strong | 3421 | 6.6648126 | 13.608858 | 3169 |
| CGCTGCTCCGCCCTGTCCATAT | Chip strong | 3421.5 | 6.0202217 | 7.0959082 | 832 |
| GATGTCGTGATCCACCCGCCCT | Chip strong | 3425 | 7.313684 | 10.200798 | 90 |
| AGTGGCGTGATCTGGCTCGGT | Chip strong | 3395 | 8.8775339 | 14.742507 | 57 |
| GGGAGGTTGAGGCTGCAGTGTG | Chip strong | 3383 | 10.8508 | 12.95626 | 3612 |
| GTGCTAAAGAATGGCTGTCCG | Chip strong | 3362 | 26.398634 | 13.195816 | 17 |
| CACCCAGGCTGGAATGCAGTGG | Chip strong | 3367 | 10.824119 | 13.172818 | 6596 |
| TCACTGCAAGCTCCACCCCTCCG | Chip strong | 3370 | 12.960393 | 9.7885542 | 122 |
| AAGTGCTGGGATTACAGGTGTG | Chip strong | 3352.5 | 6.344357 | 13.838893 | 1790 |

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|-------------------------|-------------|--------|-----------|-----------|------|
| TGGATTCCACGCCCTGCTCCTGT | Chip strong | 3340 | 6.8911624 | 11.417203 | 7562 |
| TGGTGGATTGTAAGGAGGTGT | Chip strong | 3325 | 14.98994 | 2.7421064 | 5448 |
| GCGGCAGGAGTAAAGGAGGAAG | Chip strong | 3316.5 | 10.005136 | 13.926331 | 5414 |
| TCAAATCCCAGCTCTACCACTTC | Chip strong | 3303 | 8.91047 | 9.0682478 | 4439 |
| CGGCACTGTAGTCTGGCTGGGA | Chip strong | 3297 | 6.7212648 | 9.1534166 | 78 |
| GGCTCCCCAGGTCCAGGAGCTG | Chip strong | 3288.5 | 7.409893 | 3.4725714 | 6253 |
| TCAGCCATTCTTACCTTTC | Chip strong | 3289 | 10.019641 | 3.658488 | 1702 |
| TGGCTCATTTCTAAACCCAGCT | Chip strong | 3232 | 14.053276 | 3.3175437 | 5751 |
| GCCCCGCCAGCCTCTCCATCT | Chip strong | 3281 | 7.5448685 | 10.447037 | 389 |
| ATGGGTTCAAGTGATTCTCCTG | Chip strong | 3260 | 9.7943249 | 13.811167 | 2854 |
| GTAGACCATTATCTGGGGAGT | Chip strong | 3261 | 18.415466 | 9.8317289 | 5316 |
| TTGCCAGGCTGGAGTGCAGTGG | Chip strong | 3263.5 | 10.6484 | 11.737497 | 7303 |
| TCTGGCTCTGGAGTCCACCTGC | Chip strong | 3242.5 | 6.90412 | 4.9786406 | 5090 |
| ACCACTGCCTCCAAGGTTAG | Chip strong | 3247.5 | 10.014809 | 6.09551 | 790 |
| GTGTAAGAACCTCTAGAGCCC | Chip strong | 3204 | 7.0456204 | 2.6366203 | 3291 |
| GGGCAGAGCCAGCCAGTCCC | Chip strong | 3180 | 11.937795 | 10.093319 | 4363 |
| CTGGCTAGATGTGTGGCCATGA | Chip strong | 3221 | 21.032122 | 14.058989 | 86 |
| CTGTGGTGAGGCCCTAGAATCTG | Chip strong | 3222 | 11.085442 | 6.6749387 | 5263 |
| CTAAACTGCTCTGGGTTCTAA | Chip strong | 3193 | 9.0118723 | 7.9338799 | 6296 |
| TTAACGATTTAGTTGTATTGCC | Chip strong | 3197 | 9.1805019 | 4.3070669 | 3314 |
| GCGCCACTGCACTCCCACCTGG | Chip strong | 3169 | 6.6892595 | 13.204038 | 4478 |
| CTGAGGAGAGGTGGCCTGTGTT | Chip strong | 3133 | 7.5326686 | 9.6798878 | 8108 |
| CAAATTCCATTATGCTCCCTT | Chip strong | 3158.5 | 7.6177769 | 5.7730742 | 2448 |
| CCCGGGAGGCGGGAGGTTGCAGT | Chip strong | 3131.5 | 7.7846441 | 13.396295 | 7575 |
| CCCTGATAGCCCCATATCATCAG | Chip strong | 3127 | 14.184772 | 3.5698271 | 3115 |
| GCTGCAGCTGCCCTCCGGCCT | Chip strong | 3057 | 8.4446125 | 4.0500226 | 4063 |
| TCTTGGCTGTGGCAGGTGCCG | Chip strong | 3073 | 9.474412 | 8.0332594 | 2736 |
| AACCTTGTGATCCACCCACCTT | Chip strong | 3034 | 7.7903786 | 12.639959 | 43 |
| AGAATCCCAGGCCCACTG | Chip strong | 3122 | 8.3376312 | 13.851473 | 2085 |
| AAGGCAGGAGGTTGCAGTGAGCT | Chip strong | 3045.5 | 7.8869753 | 9.9235849 | 1304 |
| GGAGGCTGAGGCAGGCGGATCA | Chip strong | 3046 | 17.235645 | 8.6580906 | 2077 |
| AGCTGGCTACTTGAGATGCAT | Chip strong | 3049 | 8.8567095 | 7.4132333 | 147 |
| ACCCATCCAGTGTCCCCTGCTAG | Chip strong | 3030 | 8.7047195 | 5.2593546 | 4667 |
| GCACCACCACCATCGGCACCTC | Chip strong | 3012 | 6.4477148 | 2.4866204 | 1074 |
| GGGGCTTCTAGGGTGCCAGATC | Chip strong | 3012.5 | 13.356146 | 7.901947 | 109 |
| CCCAGGCTGGAGGTGTAATGGTG | Chip strong | 3009 | 7.0731392 | 13.781642 | 871 |
| TATTGGCCGGCGCGCGGTGGCTC | Chip strong | 3005 | 7.5996141 | 7.7475381 | 3374 |
| GGCCCAGGTTGGAGTGCAGTGA | Chip strong | 2994 | 8.0930119 | 10.374014 | 340 |
| GGCCCAGTGCAAGCTTTCTG | Chip strong | 2960 | 7.6298795 | 6.4523926 | 211 |
| CCCGGGAGGTGGAGGTTGCAGT | Chip strong | 2962 | 7.343236 | 13.058587 | 3903 |
| TCTGAGCCAGGGCTCCTCCCT | Chip strong | 2987 | 6.3731112 | 9.5772123 | 2128 |
| GCAGCCATGTTCCCGTCTCAGCT | Chip strong | 2992 | 8.4334011 | 13.142536 | 5488 |
| AGCCCAGGAGTTGAGGCTGTG | Chip strong | 2967 | 32.270233 | 14.86321 | 6244 |
| ATGCCACTTCATTCCAGCCTCG | Chip strong | 2970 | 9.9712133 | 3.6728451 | 7633 |
| CCGGGAGGTGGAGGTTGCAGTG | Chip strong | 2974 | 9.8512392 | 11.290913 | 4895 |
| CTGTCCCCACCCAAATCTCATC | Chip strong | 2917 | 10.575051 | 6.3207545 | 2019 |
| GAATCCCTTGCAATTATCCCTT | Chip strong | 2882 | 12.693152 | 4.2042389 | 1301 |
| GCCCTTGAAGCTCTGACCCGCT | Chip strong | 2947 | 7.6962008 | 2.815666 | 331 |
| GCTGGCTCCACCTGCTGCCAGG | Chip strong | 2916 | 6.3332305 | 13.052609 | 4 |
| ATCATTATCCTCCTATTGCCT | Chip strong | 2916 | 8.0566654 | 5.4937286 | 7269 |

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|-------------------------|-------------|--------|-----------|-----------|------|
| GCACACGGCAGCCTCCTCCTGA | Chip strong | 2910 | 8.0682802 | 10.311243 | 892 |
| CCACTGAGGTAGCTGGTGAUTG | Chip strong | 2861 | 16.719574 | 7.8953633 | 288 |
| GCCTCCAGGGATGATTCCCTCC | Chip strong | 2862 | 10.98442 | 5.283977 | 982 |
| CCTCCGGTCATTGTGCGGGCCT | Chip strong | 2835 | 12.644177 | 5.132216 | 75 |
| GGAGGCGGAGGCTGCAGTGAGC | Chip strong | 2820.5 | 15.941129 | 10.098513 | 6508 |
| CCCAGGAGGTTGAGGCTGCAGT | Chip strong | 2825 | 8.4417934 | 12.283764 | 6673 |
| ATGAGATGAGGAATGGCCCTCC | Chip strong | 2753 | 10.024472 | 4.1300974 | 2639 |
| CAGGCTGGAGTGCATGACGCC | Chip strong | 2761 | 6.4190331 | 12.467172 | 2178 |
| TCACAGCTCACTGTAGCCTCGA | Chip strong | 2815 | 8.137701 | 3.0544136 | 6988 |
| GGCCTCTCTGGACAGCTGTC | Chip strong | 2816.5 | 11.840509 | 11.64073 | 3103 |
| AGGATCTGCTATGTTGGCCAG | Chip strong | 2784 | 10.949057 | 7.9714575 | 148 |
| TGTGACACTGGCCATCTGGGTT | Chip strong | 2784.5 | 11.518049 | 11.150477 | 2243 |
| CCCAGGAGGCGGAGGTTGCAGT | Chip strong | 2787.5 | 17.208832 | 12.188313 | 4707 |
| TCTCCCAGGCAGGAGTGCAGTG | Chip strong | 2795 | 6.2941146 | 8.1798553 | 1969 |
| CGCGAGGTTGGAGGTTGCAGTGA | Chip strong | 2801 | 7.9867125 | 4.0311246 | 3164 |
| TCACCCAGGCTGGAGTGTAGTG | Chip strong | 2745 | 12.479655 | 15.868072 | 4227 |
| TTCCACATGTTAGCTGGTTAAA | Chip strong | 2748 | 17.300783 | 11.944987 | 7063 |
| GAGGCCAAGGTGGGCAGATCAC | Chip strong | 2720.5 | 8.2338047 | 10.671504 | 5353 |
| GGTTTACACCTCCAGAACATGTG | Chip strong | 2724 | 8.9372482 | 2.5630777 | 7341 |
| CCTGTGGCGGGGGCCAGTGCCT | Chip strong | 2732.5 | 7.5204544 | 6.9828696 | 1750 |
| TGGTGCTAGTTAAATCTTCAGG | Chip strong | 2715 | 17.999035 | 10.341267 | 372 |
| TGCCTAGGCTGGAGTGCAGTGA | Chip strong | 2695 | 6.3287864 | 5.4875331 | 3757 |
| TCTCTAGGCTGGAGTGCAGTG | Chip strong | 2711 | 9.6044931 | 12.843214 | 5612 |
| GGCTCATATCCCGGCCATCATT | Chip strong | 2692.5 | 14.02678 | 7.6887875 | 3130 |
| GTGGTTCACCTGAGGTCAAGGAG | Chip strong | 2687 | 7.6964669 | 6.9500546 | 5420 |
| TGGCACAGCCTCCATGTCGTCC | Chip strong | 2677 | 6.0342832 | 3.5939596 | 3630 |
| GCCTCCCCAAGCAGCAGGGATT | Chip strong | 2657 | 6.1669488 | 6.5350518 | 6028 |
| GAGGCAGAGGTTGCAGTGAGCT | Chip strong | 2657 | 9.0964527 | 12.056673 | 4442 |
| CCAAAGTGTGGATTACAGGT | Chip strong | 2646 | 16.076189 | 9.7789927 | 4944 |
| ATTGCACTCCAGCCCTGCTGAC | Chip strong | 2635 | 17.208832 | 12.066468 | 4298 |
| TGCAGGCTCTGGTGACGTGGG | Chip strong | 2639.5 | 6.3321967 | 6.947082 | 2990 |
| GAACGTGCTGCCTCCTGG | Chip strong | 2627 | 6.3458524 | 7.414557 | 308 |
| ATGCATTCCCTCCCCTTCCTC | Chip strong | 2616 | 14.484365 | 5.1510644 | 4516 |
| GAGGCGGAGGTTGCAGTGAGCC | Chip strong | 2617 | 13.34126 | 11.36616 | 950 |
| GACCTCGTGTATGCCGGCCTT | Chip strong | 2588 | 16.253777 | 11.608788 | 713 |
| CCAGGCTGGAGTGCAATGGCAT | Chip strong | 2590.5 | 6.1812749 | 11.923506 | 3026 |
| TGGCGATGGTCATTTTC | Chip strong | 2609 | 8.1261625 | 3.1643765 | 4127 |
| AAAGCCTCCCAGGTTATGAGTA | Chip strong | 2572 | 7.0200324 | 7.2430992 | 7747 |
| GTATGTGCTGAGCTTCCCGC | Chip strong | 2572.5 | 6.3526735 | 4.20855 | 2185 |
| GCAGCTGACATCTGGCTGGCC | Chip strong | 2573 | 8.120388 | 3.4149001 | 7981 |
| GGACAGCCGAGTGGCCTTCTCC | Chip strong | 2573 | 10.913574 | 6.836751 | 5759 |
| TCCTCAGAATCACCTGGCAGCT | Chip strong | 2574 | 6.6020346 | 3.5169666 | 4799 |
| TTATAATGTATAGCTGTGCTG | Chip strong | 2566.5 | 15.056374 | 8.2182913 | 374 |
| GCCACTGAGCCGGCCATTGTT | Chip strong | 2514 | 7.7381911 | 2.2476037 | 3912 |
| GAGGAGCCCTCTGCC | Chip strong | 2540 | 6.3185239 | 6.9227304 | 5477 |
| CAACATGGTAAACCCCGTCTC | Chip strong | 2540 | 16.422916 | 2.931881 | 5472 |
| TCCTTGCTGAGGGTGTGCT | Chip strong | 2546 | 8.0740824 | 3.1969757 | 1183 |
| TCAGGAGGCAGGTTGCAGTG | Chip strong | 2550 | 14.153902 | 12.094613 | 7702 |
| TGCTCTAGGGAGGCCAGGA | Chip strong | 2554 | 12.58359 | 11.930317 | 247 |
| TGTTGCCAGGTTCTCCTGC | Chip strong | 2527 | 6.3116803 | 4.8975463 | 4616 |

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|-------------------------|-------------|---------|-----------|-----------|------|
| TCATCAGGGATATTGGCCTGAA | Chip strong | 2532.5 | 12.247967 | 10.842815 | 6630 |
| GAGAGGTGGAGGTTGCAGTGAG | Chip strong | 2534.5 | 6.4362307 | 12.629781 | 5970 |
| ACTCTGCCTGCGGTGGCGGGGA | Chip strong | 2519.5 | 6.1112909 | 2.732919 | 7042 |
| GGCCGCCCTTCCACGGTTCT | Chip strong | 2520 | 9.4387512 | 10.455907 | 3328 |
| TAGAACTATGGCTATGTGCCA | Chip strong | 2523.5 | 18.843672 | 7.4688845 | 227 |
| ATCCATCCTGCCATCTGAGTAG | Chip strong | 2515 | 9.8589849 | 10.131585 | 6440 |
| CTGTCCCTGAGCAACTCCTGTT | Chip strong | 2516 | 6.2773986 | 8.6073799 | 6046 |
| TCGCCAGGCTGGAAGTGCAGT | Chip strong | 2518 | 11.163055 | 15.452907 | 898 |
| GGAGTGCAGTGGCGTGATCTCA | Chip strong | 2509 | 9.1686945 | 10.351524 | 3303 |
| CTCAGCCCCAGCCCAGATAGCA | Chip strong | 2359 | 8.9799547 | 12.175259 | 5776 |
| GACCCATCCTCCACTTGGCAGC | Chip strong | 2498 | 6.505065 | 6.8388047 | 307 |
| TGTGCCTAGTTCTGTATTAC | Chip strong | 2504.5 | 16.729868 | 8.0277433 | 7339 |
| TTGGCCATCTAACGCCAGCCAC | Chip strong | 2464 | 9.1909533 | 7.750977 | 7523 |
| AAGGCAAGGCTTCCAGCTCCCC | Chip strong | 2465.5 | 6.0202217 | 6.2276101 | 5360 |
| TGCCGAGGCTGGAGTGCAGTGG | Chip strong | 2467.5 | 8.8668938 | 8.8795528 | 5670 |
| CACCCAGGCTGGAGAGCAGTGG | Chip strong | 2478 | 9.0987244 | 11.920556 | 444 |
| AACCCAGGAGGTGGAGGTTGTG | Chip strong | 2482.5 | 21.895887 | 11.887776 | 6437 |
| AGTCGCTGTTGGCGTGGCACT | Chip strong | 2426.5 | 6.5083675 | 3.8499751 | 5117 |
| TCACTCAGGCTGGAGTGCAGTG | Chip strong | 2427 | 8.9816837 | 12.445157 | 4921 |
| TTTTGGTTGTTGGGTAAGAGTA | Chip strong | 2392 | 6.2773986 | 5.6073937 | 3794 |
| GCCTGTCCCGCACCGGAGCCG | Chip strong | 2397 | 7.096612 | 10.159995 | 610 |
| CCAGGAGGTGGAGGTTGCGGTG | Chip strong | 2398 | 12.923675 | 7.9789319 | 4896 |
| GAGGTTGGGGCTGCAGTGAGCT | Chip strong | 2391.5 | 7.2082191 | 11.666763 | 1757 |
| CCCGTGCCTTCAGCAGTCCTG | Chip strong | 2377 | 7.0694799 | 4.8466434 | 7109 |
| CAAGGTGCCATGCTGGCGGGG | Chip strong | 2339 | 11.124713 | 9.2460661 | 2937 |
| GGAGGCGGAGGTTGCAGTGAGT | Chip strong | 2351 | 14.301351 | 8.3588333 | 5269 |
| GCCTAGTGGATTGAAGGGCC | Chip strong | 2352 | 20.613605 | 8.8114462 | 332 |
| GGAGGCGGAAGTTGCAGTGAGC | Chip strong | 2314 | 8.7133474 | 5.029707 | 3718 |
| GCCCTCCAGCCTGTGGAACCGG | Chip strong | 2293 | 7.0838871 | 2.9603255 | 4934 |
| CTTGCCCTCAGTCCATCAGTCA | Chip strong | 2293.5 | 18.055964 | 6.2058563 | 5032 |
| CTGGCTCCTGTTAACCAGCTG | Chip strong | 2294 | 6.9299874 | 8.8361721 | 1564 |
| TCCTGGGAGGCAGGAGGTTGCAG | Chip strong | 2269 | 6.121397 | 7.7621231 | 864 |
| CTGATCTCAAGTGATCCACCCA | Chip strong | 2249 | 7.9458203 | 9.493042 | 1986 |
| CATGGCAGCTCCTCCAGTGTGA | Chip strong | 2256.5 | 6.8781896 | 5.7773385 | 2949 |
| CACCCAGGCTGGAGTGCAGTGA | Chip strong | 2243 | 8.5379591 | 11.457872 | 6595 |
| CTGGTAGCTCCTGAATATCCCT | Chip strong | 2223 | 17.251909 | 5.7171526 | 7371 |
| ATCTCCGAAAGTCTTGTCAACC | Chip strong | 2203 | 6.4477148 | 2.7755287 | 5598 |
| ATTGGTAGTTTGATTTCTCT | Chip strong | 2205.5 | 12.860962 | 5.780735 | 6651 |
| GCTAGGTTGGGAAAGTTCTCCT | Chip strong | 2180 | 6.2453051 | 9.2986526 | 2689 |
| TCGTTACCATAGCCTTGTCCCT | Chip strong | 2169 | 6.6286459 | 10.14022 | 2615 |
| TTCACTGCAACCTCCGCCTCCC | Chip strong | 32044.5 | 19.90851 | 19.617628 | 3208 |
| TGCCCACTGCTGGCCACCACCC | Chip strong | 32112 | 15.630626 | 16.785101 | 364 |
| TCACTGCATCCTCCGCCTCTG | Chip strong | 32214 | 21.241261 | 13.073997 | 5947 |
| CTCATTGCAACCTCCGCCTCCC | Chip strong | 33077 | 20.142548 | 20.350861 | 5040 |
| GCTCACTGCAACCTCCACCTCC | Chip strong | 33649 | 18.60092 | 20.711613 | 2349 |
| GGCTGGCCCCATCCAGGCTGGCA | Chip strong | 65518 | 10.117671 | 10.864906 | 212 |
| CGTCAGCGGGCTGGCCGTGGA | Chip strong | 65518 | 10.117671 | 31.213285 | 5831 |
| GCGCTCTTCTCCGGCCCGC | Chip strong | 65518 | 10.953011 | 12.865757 | 7638 |
| CTCGGGCACCCCTGGTCTGGTG | Chip strong | 65518 | 11.238881 | 23.126007 | 3861 |
| ACAAAGCGCTCTCTTTAGAGT | Chip strong | 65518 | 11.238881 | 26.766436 | 159 |

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|-------------------------|-------------|-------|-----------|-----------|------|
| AAAGTGCTTCTCTTGGTGGGT | Chip strong | 65518 | 11.238881 | 30.157898 | 1444 |
| GGGGCTGGTCTTCCACTTACT | Chip strong | 65518 | 11.24554 | 19.391401 | 108 |
| GGAGGCTGGCCTTCAGACGGGT | Chip strong | 65518 | 12.034198 | 25.266558 | 339 |
| CCTCGGTTTCCACATCTGTACA | Chip strong | 65518 | 12.162615 | 12.267507 | 910 |
| ACGCGCTGGGGCGCTGGCCAAT | Chip strong | 65518 | 13.337035 | 9.5484018 | 161 |
| ACAAAGTGCCTCCTTTAGAGT | Chip strong | 65518 | 13.412503 | 32.421429 | 261 |
| CGCCTGGCCCCCAGTACTTGT | Chip strong | 65518 | 14.386203 | 22.674049 | 322 |
| GCCTGGCCTAAATTAGTAATT | Chip strong | 65518 | 14.47023 | 33.939186 | 333 |
| GTGGCCCACATCACGTTCGCCTT | Chip strong | 65518 | 14.54515 | 20.760025 | 5954 |
| CCCTCTGGCCCCGTGGTGGAT | Chip strong | 65518 | 14.648276 | 19.804953 | 74 |
| CTGCCTGCCTGGCCCAGGAACC | Chip strong | 65518 | 14.752467 | 36.164337 | 82 |
| CGCCCGCTGGCCCTGCGATCTC | Chip strong | 65518 | 15.196337 | 33.776985 | 294 |
| AGGACCTGTCCCCCTGGCCACT | Chip strong | 65518 | 15.796532 | 15.770715 | 165 |
| CAGCAGCACACTGTGGTTGTA | Chip strong | 65518 | 16.623587 | 30.172779 | 155 |
| ACTGCACTCCAGCCTTCCAG | Chip strong | 65518 | 16.869547 | 28.85684 | 2446 |
| TGGCGGATCTTCCTGCCTCCC | Chip strong | 65518 | 17.931589 | 23.332502 | 250 |
| CACTGCACTCCAGCCTGGTGA | Chip strong | 65518 | 18.826578 | 34.620605 | 4181 |
| CCAAGGTGGGAGGATTGCTTGA | Chip strong | 65518 | 19.42584 | 35.754147 | 1670 |
| CACTGCACTTCAGCCTGGTGA | Chip strong | 65518 | 19.494125 | 35.251587 | 3383 |
| CCACTGCACTCCAGCCTGGCA | Chip strong | 65518 | 19.59687 | 23.317396 | 3776 |
| CCGCCTGGCCCATTGCAGGGCA | Chip strong | 65518 | 19.692606 | 29.045151 | 317 |
| CACTGCACTTCAGCCTGGCGA | Chip strong | 65518 | 19.854979 | 32.441864 | 6271 |
| ACCACTGCACTCCAGTCTGGC | Chip strong | 65518 | 19.886633 | 30.113441 | 745 |
| CACTGCACTCCAGCCTCGGTGA | Chip strong | 65518 | 19.946772 | 34.137524 | 4299 |
| CACTGCACTCCAGCTCTGGT | Chip strong | 65518 | 20.15584 | 31.571056 | 62 |
| CCACTGCACTCCAGCCTGCCAA | Chip strong | 65518 | 20.333113 | 17.882483 | 1118 |
| GTATTGCTTGAGCCAGGAGTT | Chip strong | 65518 | 20.541035 | 33.582275 | 5303 |
| CACTGCACTCCAGCCTGGCTG | Chip strong | 65518 | 20.659618 | 21.962681 | 3357 |
| CACTGCACTCCAGCCTGGCGAC | Chip strong | 65518 | 21.073904 | 27.87985 | 8137 |
| AGCGCCACTGCACTCCAGCCTG | Chip strong | 65518 | 21.477427 | 33.498734 | 4294 |
| AGCTGGTGCTCGGGAGCTGGC | Chip strong | 65518 | 21.547987 | 16.272154 | 5516 |
| ATGGCTGCCTGGCGCTGGCCG | Chip strong | 65518 | 22.031187 | 4.5536995 | 704 |
| TACTGCACTCCAGCCTGGTGA | Chip strong | 65518 | 22.371189 | 36.002476 | 4919 |
| ACAAAGTGCCTCCCTTAGAGT | Chip strong | 65518 | 22.461653 | 34.028076 | 45 |
| CCCCACTGTCCCCGGAGCTGGC | Chip strong | 65518 | 22.799175 | 24.102064 | 71 |
| CACTGCACTCCAGCCTGGGAGA | Chip strong | 65518 | 22.925808 | 34.725494 | 685 |
| CATTGCACACCAGCCTGGCAA | Chip strong | 65518 | 23.259714 | 27.904207 | 960 |
| ATTGCACTCCAGCCTGGCGAC | Chip strong | 65518 | 24.324524 | 35.482765 | 6543 |
| ACTGCATTCCAGCCTGGCAAC | Chip strong | 65518 | 24.732506 | 33.288292 | 7070 |
| GGCGCTGGCCTGTGGATCCCG | Chip strong | 65518 | 24.841112 | 31.449797 | 105 |
| TGCACCACTGCACTCCAGCCTG | Chip strong | 65518 | 25.425095 | 34.867786 | 5937 |
| TCACTGCACTCCAGCCTGGGT | Chip strong | 65518 | 25.576307 | 22.681875 | 8014 |
| ACTGCACTCCAGCCTGGCGGC | Chip strong | 65518 | 25.924618 | 35.366241 | 1765 |
| ACTGCACTCCAGCCTGGGACAC | Chip strong | 65518 | 25.933289 | 35.343163 | 6805 |
| CACTGCACTCCAGCCTGCGCAA | Chip strong | 65518 | 26.453463 | 34.462708 | 5891 |
| GTGGGTTCGTGGTCTCGCTGGC | Chip strong | 65518 | 26.617212 | 17.195196 | 1080 |
| ATGCCACTGCACTCCAGCCTGG | Chip strong | 65518 | 26.690199 | 28.459244 | 4950 |
| CACTGCACTCCAGCCTGGGTCA | Chip strong | 65518 | 26.882214 | 33.427895 | 5979 |
| CATTGCACTCCTGCCTGGCAA | Chip strong | 65518 | 27.010284 | 16.583426 | 1937 |
| ACTGCACTCCAGCCTGGCGAC | Chip strong | 65518 | 27.08153 | 35.482765 | 2630 |

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|--------------------------|-------------|---------|-----------|-----------|------|
| CACTGCACTTCAGCCTGGGCAA | Chip strong | 65518 | 27.199547 | 28.956656 | 811 |
| ACTGCACTCCAGCCTGGGTGAC | Chip strong | 65518 | 27.343826 | 35.625153 | 2086 |
| GCGGCGGCGGTAGCAAAAATGA | Chip strong | 65518 | 27.5298 | 22.089998 | 207 |
| GCGGCGGCGGTATTGAGCATG | Chip strong | 65518 | 27.5298 | 33.416046 | 7217 |
| TCTGCAGCAGAGCAGCTCCCTG | Chip strong | 65518 | 27.5298 | 35.37384 | 234 |
| ACTGCACTCCAGCCTGGGTGAT | Chip strong | 65518 | 27.70583 | 35.281982 | 6628 |
| ACTGCACTCCAGCCTGGGT | Chip strong | 65518 | 27.764378 | 33.832714 | 5906 |
| CACTGCACCCAGCCTGGGCAA | Chip strong | 65518 | 28.324137 | 34.314873 | 5050 |
| CACTGCACCCAGCCTGGGTGA | Chip strong | 65518 | 28.667358 | 34.954544 | 4218 |
| AGGGTTGTGTGCTGGCCGCTGG | Chip strong | 65518 | 29.01285 | 32.102142 | 272 |
| CATTGCACCCAGCCTGGGCCA | Chip strong | 65518 | 29.033922 | 21.707558 | 3482 |
| CATTGCACCCAGCCTGGGTGA | Chip strong | 65518 | 29.090452 | 30.6901 | 8078 |
| GCACTCCAGCCTGGTAACAGC | Chip strong | 65518 | 29.270939 | 27.328928 | 7319 |
| ACTGCACTCCAGCCTGGGTAA | Chip strong | 65518 | 29.763027 | 35.404873 | 5883 |
| CACTGCACCCAGCCTGGGCGA | Chip strong | 65518 | 30.700432 | 32.102142 | 4975 |
| CACTGCACCCAGCCTGGGCCA | Chip strong | 65518 | 31.247635 | 27.744917 | 2836 |
| GGTGGCCCCCTGGGAGATGCTGG | Chip strong | 65518 | 31.295538 | 14.111359 | 14 |
| CATTGCACCCAGCCTGGGTAA | Chip strong | 65518 | 31.334749 | 27.271093 | 5030 |
| GCCTGGGAGTTGCGATCTGCCG | Chip strong | 65518 | 31.678772 | 9.6128397 | 4649 |
| ACTGCACTCCAGCCTGGGCACA | Chip strong | 65518 | 31.833015 | 34.428837 | 4728 |
| ATTGCACCCAGCCTGGGCAAC | Chip strong | 65518 | 33.306091 | 35.513947 | 5110 |
| TCACTGCACCCAGCCTGGGCA | Chip strong | 65518 | 34.101166 | 18.829176 | 546 |
| CATTGCACCCAGCCTGGGCCA | Chip strong | 65518 | 34.565254 | 30.419044 | 5699 |
| CACTGCACCCAGCCTGGGCCA | Chip strong | 65518 | 36.446095 | 33.140068 | 5077 |
| ACTGCACTCCAGCCTGGGCAAC | Chip strong | 65518 | 37.057747 | 34.517231 | 2913 |
| TGTGCTGGCCTTGGTGACTTC | Chip strong | 65518 | 44.612064 | 26.016636 | 136 |
| CATGCTGGCCCACACCGCTGC | Chip strong | 57891 | 37.069935 | 17.358248 | 176 |
| ATTGCACCCAGCCTGGGTGAC | Chip strong | 57938 | 24.984217 | 35.201714 | 2131 |
| GGCTTCCCTGCCTGGGCTGGCC | Chip strong | 58372 | 13.006404 | 4.4936109 | 345 |
| ACCTCCTGGCCTCAAGCAATCC | Chip strong | 58457 | 12.381654 | 19.294073 | 3885 |
| CATTGCACCCAGCCTGGGCG | Chip strong | 59621 | 23.220642 | 28.257877 | 3607 |
| TCACTGCACCCAGCCTGGGTGA | Chip strong | 60679 | 16.108965 | 25.527098 | 4711 |
| CCACTGCACCCAGCCTGGGTG | Chip strong | 61492.5 | 17.94875 | 20.821732 | 382 |
| CTCACTGCAACCTCCGCCTCCT | Chip strong | 62403 | 22.993574 | 18.170233 | 6736 |
| GGCTCACTGCAACCTCTGCCCT | Chip strong | 62440 | 23.696358 | 18.67169 | 5665 |
| GCCTGGCTAATTCCAGCATT | Chip strong | 62842.5 | 16.076189 | 31.293688 | 334 |
| CTAAATGCCCTCTGGCACAG | Chip strong | 63453 | 17.556129 | 20.293009 | 6574 |
| TGGCCTCTCTGGCTGAGTTTC | Chip strong | 63656 | 13.118483 | 10.569239 | 4339 |
| GAAGGGGGAAAGAGAGCTGGCCG | Chip strong | 63993 | 20.677708 | 18.040138 | 305 |
| AGTGGCCTGGAGAGCCCCGCCTGG | Chip strong | 64840 | 12.445142 | 20.585953 | 2814 |
| CACTGCACCCAGCCTGGGCCA | Chip strong | 65046 | 15.988069 | 31.551188 | 1029 |
| ATGCCACTGCACCCAGCCTAG | Chip strong | 49924.5 | 14.368088 | 30.30353 | 3952 |
| CCAAGCAGAGCAGCCTCTGG | Chip strong | 50138.5 | 17.876169 | 21.568254 | 935 |
| CCCGGCACCTCCGCTGCACAC | Chip strong | 50589.5 | 17.716768 | 10.848449 | 72 |
| ATGCCACTGCGCTCCAGCCTGA | Chip strong | 50941.5 | 15.106459 | 30.447573 | 60 |
| CCCCACTGTTTCTTCATCTA | Chip strong | 50957 | 32.576454 | 4.8442335 | 314 |
| CTTGGAGTAGGTATTGGGTGG | Chip strong | 51071 | 16.39068 | 33.942337 | 303 |
| GCTCACTGCAACCTCTGCCCTCC | Chip strong | 52175 | 22.994247 | 20.293594 | 1457 |
| CACTGCAACCTCTGCCCTCTGG | Chip strong | 53207 | 22.508492 | 13.233194 | 3117 |
| AGGTGCTGGGGCTTGGCCTGCT | Chip strong | 54992 | 14.781937 | 19.839622 | 150 |

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|-------------------------|-------------|---------|-----------|-----------|------|
| CACTGCAACCTCCGCCTCTGG | Chip strong | 55476 | 22.094246 | 10.714499 | 6994 |
| ACTGCGCTCCAGCCTGGGTGAC | Chip strong | 46098 | 18.273163 | 32.816708 | 4509 |
| TGCCCGGATACCCCTGGCCTC | Chip strong | 46111 | 13.316625 | 10.030684 | 240 |
| ACTGCACTCCTGCCTGGGTAAC | Chip strong | 46280 | 12.181033 | 26.546303 | 6525 |
| ACTGCACTCCATCCTGGGCAAC | Chip strong | 46281.5 | 15.235478 | 33.271416 | 4582 |
| ATTGCACTCCAGCCTGAGCAAA | Chip strong | 46579 | 22.505102 | 33.557095 | 278 |
| AGCTCACTGCAACCTCCGCCTC | Chip strong | 47293.5 | 20.812145 | 17.740503 | 7285 |
| TCTCTCGCTGGCCCTGGGGA | Chip strong | 47791.5 | 15.379544 | 20.008915 | 28 |
| CTCACTGCAACCTCTGCCTCCC | Chip strong | 48422 | 24.255339 | 20.696438 | 7327 |
| CCGTCCCCGGTGCTGCCTGCGC | Chip strong | 48514 | 9.4747534 | 7.9190497 | 180 |
| TCACTGCAACCTCTGCCTTGT | Chip strong | 48652.5 | 22.205072 | 18.44136 | 408 |
| ACTGCACTCCAGCCTGGGGTC | Chip strong | 49031.5 | 14.262467 | 31.189104 | 1898 |
| TGCTAGCTGCCCGAAGGTCTCA | Chip strong | 39989 | 47.058292 | 15.67876 | 129 |
| CCTGGCCGCTGTGCCCTCT | Chip strong | 40002 | 11.873036 | 10.703612 | 292 |
| GGCCACTGCTCTCCAGCCTGGG | Chip strong | 40431 | 15.55442 | 22.767414 | 638 |
| TGCACCACTGCATTCCAGCCTG | Chip strong | 41028 | 15.563788 | 31.684296 | 5562 |
| ACACTTGGCCCTGGCCGCCCTT | Chip strong | 42189 | 12.009233 | 22.436626 | 143 |
| GCTCACTGCAACCTCCGCCCTC | Chip strong | 42294 | 20.673286 | 23.478565 | 2226 |
| TCACTGCAACCTCCGCCCTCCG | Chip strong | 42376 | 22.551825 | 18.304768 | 2606 |
| TGACCTCTTCTGACTAATT | Chip strong | 43651 | 10.281033 | 24.914602 | 29 |
| TCACTGCAACCTCTGCCTCCG | Chip strong | 43860.5 | 22.502304 | 15.810101 | 7312 |
| ATGCCACTGCGCTCCAGCCTGG | Chip strong | 44255 | 14.692498 | 32.195774 | 6919 |
| CTGCTGCGCTGGCCGTCACGGT | Chip strong | 45168 | 18.758972 | 18.507338 | 83 |
| TTATTGCACTCCAGCCTGGGTA | Chip strong | 45303 | 21.338472 | 22.149384 | 375 |
| CGTGCCACTGCACTCCAGTCTG | Chip strong | 29565 | 13.984879 | 26.717236 | 3773 |
| TCACTGCACTTCAGCCTGGGCA | Chip strong | 31458 | 10.144489 | 22.4685 | 3168 |
| GGCTCACTGCAACTTCCGCCCTC | Chip strong | 31704 | 19.028578 | 16.190495 | 4481 |
| CTCAGTGCTGCTGGCTCCTGTC | Chip strong | 30057 | 40.88406 | 25.543219 | 324 |
| ACTGCACTTCAGCCTGGGTGTC | Chip strong | 30071 | 14.363188 | 30.014778 | 4352 |
| GACCCCTAAACCCGCTGGGCTG | Chip strong | 30088.5 | 13.552105 | 6.4749699 | 87 |
| AGCTCATTGCAACCTCCGCCCTC | Chip strong | 30089 | 24.942677 | 12.997955 | 6521 |
| TTGCCCAAGGCTGGAGTGCAGTG | Chip strong | 30880.5 | 19.972326 | 29.117062 | 6485 |
| CCTGGCTCTGGCTTCCCTGTTGT | Chip strong | 34525 | 11.373339 | 6.4300051 | 318 |
| AGTGATTCTCCTGCCTCAGCCT | Chip strong | 35041 | 21.798445 | 19.430222 | 1293 |
| CATTGCACTCCAGCCTAGGCAA | Chip strong | 35413 | 18.971554 | 24.194717 | 5830 |
| ACCCTGGCCGACTGCCCTT | Chip strong | 35652 | 12.982363 | 11.41268 | 160 |
| GCCTGGCCTCCTACAGTACTTT | Chip strong | 35866 | 15.014146 | 23.263319 | 335 |
| CTCACTGCAACCTCCGTCTCCC | Chip strong | 36527.5 | 21.028955 | 23.176895 | 3209 |
| GAGGCTGAGGCGGATGGATCAC | Chip strong | 37381 | 14.008185 | 28.093838 | 6364 |
| GCCCTTCGGAAAGCGTCGCCCTG | Chip strong | 37481 | 13.375318 | 6.6135831 | 95 |
| TGCCTGGCCTCCTGATTCCCTC | Chip strong | 37634.5 | 13.004288 | 2.9085336 | 32 |
| ATGCCACTGCACTTCAGCCTGG | Chip strong | 37857.5 | 13.168159 | 31.471567 | 5827 |
| CCATTGCACTCCATCCTGGGCA | Chip strong | 37862.5 | 18.121622 | 18.236954 | 2779 |
| CCAGACCATTTCGCTTACC | Chip strong | 38076 | 30.955603 | 11.095823 | 177 |
| TGGTAGTCGGCCTCGGTGGCTC | Chip strong | 38277.5 | 43.447659 | 21.633255 | 4679 |
| CGTAAGTCACAGCGCCTGGCCC | Chip strong | 38826 | 11.506068 | 25.787857 | 188 |
| GGCTCACTGCAACCTCCACCTC | Chip strong | 38975.5 | 20.41017 | 17.418346 | 4236 |
| GGCTCCCTGCAACCTCCGCCCTC | Chip strong | 39003 | 18.926107 | 13.134951 | 1449 |
| CTCACTGCAACCTCTGCCCTCC | Chip strong | 39028 | 21.537285 | 22.098822 | 5308 |
| TCACTGCAACCTCCGCCCTGCTG | Chip strong | 39092.5 | 19.973478 | 20.767599 | 2497 |

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|-------------------------|-------------|---------|-----------|-----------|------|
| ACCATTGCACTCTAGCCTGGGC | Chip strong | 24856 | 14.974783 | 26.093969 | 6489 |
| CTCACTGCAAGCTCCGCCTCCC | Chip strong | 25071 | 21.122744 | 18.134468 | 5720 |
| CAGGCTCTCCCTCTGGCCAAG | Chip strong | 25089 | 10.865691 | 11.601097 | 67 |
| GATGAGTTGCCTGGCCTGCAG | Chip strong | 25445.5 | 12.297516 | 17.035336 | 329 |
| CGGGTTACGCCATTCTCCTGCC | Chip strong | 25616.5 | 15.660168 | 6.7002292 | 1435 |
| TCACTGCAACCTCTGCCTGCCA | Chip strong | 25898 | 18.696442 | 17.538256 | 6576 |
| GCTGTAAGTCACCTGGCCCGAT | Chip strong | 26191 | 8.8471966 | 25.053482 | 101 |
| CTCACTGCAAGCTCTGCCTCCC | Chip strong | 26494.5 | 19.073179 | 16.964733 | 7823 |
| AGAAGGGCTGGCAGGAGTT | Chip strong | 26652 | 14.563484 | 25.132761 | 264 |
| ACTGCAACCTCCACCTCCTGGG | Chip strong | 26924 | 17.396763 | 10.658098 | 5639 |
| TGCCTGGCCTCTTCAGCACTTC | Chip strong | 27021 | 10.873885 | 26.68429 | 33 |
| CGTGCCACTGCACTCTAGCCTG | Chip strong | 27042.5 | 12.034669 | 26.515484 | 2948 |
| GGTGCCCCATCGCGGGTGGCTG | Chip strong | 27077 | 14.316696 | 22.61035 | 216 |
| GCTCCTGGCCGGGCTGCTCCTG | Chip strong | 27106 | 14.495318 | 9.280777 | 99 |
| AAGTGCTCATAGTCAGGTAGT | Chip strong | 27166.5 | 9.1624584 | 28.31859 | 258 |
| CACTGCAATCTCTGCCTCCTGGG | Chip strong | 27656.5 | 19.716053 | 17.422838 | 3029 |
| ATTGCACTCCAGCCTGGGGGAC | Chip strong | 27662 | 16.315468 | 27.849897 | 4013 |
| CAGGAAAAGCGGGCTGGGGCT | Chip strong | 27684.5 | 9.7338009 | 6.1309323 | 284 |
| GATGCCCTGGCCTGTCCCCGCA | Chip strong | 28071.5 | 11.474154 | 19.152775 | 486 |
| TCACTACAAACCTCCGCCTCCTG | Chip strong | 28515 | 18.559631 | 13.999067 | 5102 |
| ACTGCACTTTAGCCTGGGC | Chip strong | 28568 | 11.638906 | 27.546202 | 1686 |
| TCACGCGCCCTCCTGGGCCCTG | Chip strong | 28630 | 10.411592 | 10.865385 | 117 |
| GGCGTGCCCTGGCCCCGAGGCT | Chip strong | 28813 | 10.987214 | 21.873014 | 342 |
| TCCTGGGGCTTGTGCGCTGGCCA | Chip strong | 28926 | 12.960393 | 7.4913173 | 126 |
| TCTCCCTGGTCTCGCGCGCTG | Chip strong | 21744.5 | 9.9947338 | 2.3839858 | 7366 |
| ACCTGGCCAATTTTGATTTT | Chip strong | 21785 | 13.908694 | 17.245144 | 7405 |
| GCTTCAGAGAGGGGTGAAGCTG | Chip strong | 21900 | 17.158428 | 13.963737 | 102 |
| ACTGCACTTCAGCCTGGGTGAC | Chip strong | 21975 | 15.030581 | 28.149118 | 5386 |
| TGGCTAACAAAGGTGAAACCCG | Chip strong | 22025 | 9.0206518 | 5.915132 | 719 |
| TGCCCAGGCTGGAGTGCAGTGG | Chip strong | 22039 | 16.547016 | 22.788761 | 1844 |
| TCAAGCAATTCTCTGCCTCAG | Chip strong | 22552 | 20.397219 | 19.767324 | 7690 |
| GTCATGGTGCTAGCGGAATGT | Chip strong | 23180 | 29.411751 | 28.092485 | 8081 |
| CTCTCCTGGCCACCTCCATGA | Chip strong | 23276 | 12.960393 | 7.0737572 | 299 |
| CGTTGGTCTGTCCCCCTGGCACC | Chip strong | 23919 | 9.503809 | 5.7624073 | 7846 |
| ACTGCAACCTCCGCCTGCCAGG | Chip strong | 24273 | 17.594145 | 15.796898 | 5764 |
| GGCTCACTGCAAGCTCCGCCCTC | Chip strong | 20587 | 20.311087 | 7.2478337 | 5418 |
| GGCTGGTGGCTGGTCTGGACC | Chip strong | 20736.5 | 31.680035 | 17.914019 | 213 |
| CACCCGCTGGTCCCTGCAGTTC | Chip strong | 20816 | 8.5344362 | 27.261486 | 280 |
| CCCTGGCTCACTTCTGTTGTG | Chip strong | 20839 | 26.185976 | 5.4283981 | 316 |
| GGTAGTCTTGTCCCTGGC | Chip strong | 20872 | 12.44091 | 3.1238594 | 110 |
| CATCACCCCCAGACCTCAGTGC | Chip strong | 20958.5 | 35.708847 | 4.6072259 | 313 |
| AGCCTGCGATCCACCTGGCCT | Chip strong | 20991 | 14.852747 | 4.5749111 | 3000 |
| CTCTGCCTCCCAGGTTCAAGCG | Chip strong | 20999.5 | 17.079414 | 18.674911 | 6741 |
| ACTGCACTCCAACCTGGGCAAT | Chip strong | 21062 | 16.688629 | 27.100132 | 4373 |
| GGCTGGTTAGATTGTGGTCTT | Chip strong | 21258 | 33.569485 | 15.757149 | 9 |
| ACTGCCCTCCAGCCTGGGTGAC | Chip strong | 21572 | 13.925464 | 26.790289 | 3240 |
| AGTCCGTCCTGTCAAGCAGCTG | Chip strong | 19706 | 7.5470443 | 26.932724 | 2889 |
| ACTGCACTCCAGCCCCGGGTGAC | Chip strong | 20151 | 12.282559 | 27.872829 | 4228 |
| TTGGTCCCCTCAACCAGCTAC | Chip strong | 20228 | 9.5504265 | 23.87529 | 140 |
| GCTCACTGCAAGCTCCGCCTCC | Chip strong | 20232.5 | 20.168652 | 18.056574 | 5806 |

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|-------------------------|-------------|---------|-----------|-----------|------|
| GTGGCTCACGCCTGTAATCCCA | Chip strong | 20268 | 19.763882 | 18.321419 | 2775 |
| CATTGCACTCTAGCCTGGGTGA | Chip strong | 20339 | 32.270233 | 21.095203 | 4217 |
| CATTGCACTCCAGTCTGGGCCA | Chip strong | 20401.5 | 25.695589 | 15.621833 | 4618 |
| AAAGTGCCTGCGACATTGAGCG | Chip strong | 20430.5 | 8.490345 | 28.331139 | 8005 |
| TCAGGGGTTGGCTTGTGTT | Chip strong | 20519.5 | 8.8405285 | 21.048086 | 123 |
| GCTCACTGCAAGCTCTGCCTCC | Chip strong | 20572.5 | 19.847269 | 12.887133 | 6177 |
| TACTGCACTCCAGCCTGCCAA | Chip strong | 18364 | 10.029301 | 16.731598 | 226 |
| CTCACTGCAAGCTCTGCCTCCA | Chip strong | 18388.5 | 17.632027 | 21.920879 | 3227 |
| AATTGCACGGTATCCATCTGTA | Chip strong | 18407 | 8.3120737 | 26.950815 | 158 |
| TGGTTCTCGCTGGCGGCTGC | Chip strong | 18451 | 17.683105 | 11.562138 | 134 |
| CCCTGCCTGTCCTGGTCCCGTT | Chip strong | 18466 | 9.747386 | 21.814604 | 290 |
| CAAGCCATTCTCCTGCCTCAGC | Chip strong | 18892 | 18.51676 | 21.383736 | 5916 |
| AGTGCTGGCTATCTACTGCTA | Chip strong | 18896.5 | 9.2577066 | 21.32906 | 5033 |
| CTCACTGAAACCTCCGCCTCCC | Chip strong | 18912 | 16.516399 | 5.5995822 | 1826 |
| CACTGCTACCTCTGCCTCCCGG | Chip strong | 19159 | 17.182699 | 10.042536 | 2117 |
| TCTCCACAGCTGGCCCCAAGA | Chip strong | 19483.5 | 23.591568 | 26.742323 | 231 |
| CGGGTTACGCCATTCTCCTGC | Chip strong | 19575.5 | 15.317244 | 7.2952814 | 4596 |
| ATATGCAGTCTCTGCCCCTCT | Chip strong | 18270 | 7.3851495 | 16.705791 | 3215 |
| CCTCGCTCTCCATTGGGCCCTC | Chip strong | 9378.5 | 6.9943829 | 8.7534571 | 76 |
| CCAGGCTGGAGTGCAGTGGCAC | Chip strong | 14590 | 15.059402 | 24.507948 | 2356 |
| GGCTCACTAACACCTCCGCCCT | Chip strong | 14771.5 | 14.710124 | 15.748096 | 5548 |
| CACAGCCTCCTCTGGCTCACGG | Chip strong | 14804 | 7.7305474 | 23.87908 | 7160 |
| CTCACTGCAATCTCCGTCTCCC | Chip strong | 14910 | 15.75562 | 18.259068 | 3685 |
| ATGCAGCCCCCTGGTGCCCGGG | Chip strong | 14258.5 | 14.995996 | 10.545995 | 2763 |
| TCACTGCAAGCTCCGCCTCCCG | Chip strong | 14266.5 | 28.837795 | 11.699102 | 1419 |
| ACCAGCCTGGCCAACATGGTGA | Chip strong | 14312.5 | 12.221603 | 21.144381 | 1861 |
| GGCCGGGTGCTCTGGAGGTGCT | Chip strong | 14393 | 11.734104 | 12.172738 | 7 |
| GCCCAGGCTGGAGTGCAGTGGC | Chip strong | 14406 | 17.516109 | 26.539131 | 3023 |
| TCCGGGTGCCAACGTGCCCTA | Chip strong | 13959 | 9.6208868 | 9.7457113 | 6361 |
| GAGGCTGAGGCAGGGAGGATCAC | Chip strong | 13980 | 11.834332 | 23.254768 | 1557 |
| GTGGCCCAGGCTGGAGTGCAGT | Chip strong | 14037 | 16.79743 | 18.340912 | 4920 |
| CGGCTCACTGCAGCTCCGCCCTC | Chip strong | 14047 | 17.9716 | 6.964889 | 2543 |
| AGCTCCTGGCTCAAGCAATCC | Chip strong | 14107 | 10.339123 | 18.669428 | 266 |
| ACTGCAAAGGGAAGCCCTTCT | Chip strong | 14213 | 7.6344547 | 19.22015 | 4293 |
| CTGCTCCCCAGCCTGCGCCTT | Chip strong | 15059 | 11.630778 | 16.378119 | 8043 |
| TGGCGGCGTGTGGACTGAGGAC | Chip strong | 15121 | 9.9330997 | 18.565649 | 3239 |
| TTAAATACAACTCTGCCCT | Chip strong | 15129 | 15.825633 | 8.2785378 | 379 |
| CTCTGTTGCCTGCTGCCATC | Chip strong | 15154 | 17.421993 | 10.804789 | 884 |
| GTAGCTGTGTTCATCTGGATG | Chip strong | 15186.5 | 37.683685 | 11.412519 | 113 |
| ACAGATTCACTGCACTGGCCAT | Chip strong | 15207 | 9.5306025 | 12.396938 | 2195 |
| AAGTGCTAGTGAGTCTATTGTA | Chip strong | 15263 | 30.581371 | 17.914198 | 156 |
| GCCCCAGCTCACCGGCTCACTG | Chip strong | 15345 | 20.667051 | 7.4258513 | 309 |
| GTGCGGCTGGCCTCAAGTGG | Chip strong | 15350 | 9.6908836 | 19.487803 | 16 |
| ATTGCACTCCGGCCTGGGTGAC | Chip strong | 15397 | 13.824861 | 25.123175 | 6763 |
| GCTGTAGTGAATGGCGCGTTC | Chip strong | 15429 | 10.329166 | 7.1725068 | 2584 |
| GTGGCTCACACCTGTAATCCCA | Chip strong | 15446 | 13.370042 | 20.396935 | 2343 |
| CACCTGTACAGGGCCGGGCTGG | Chip strong | 15471 | 7.5139775 | 10.770471 | 7566 |
| ACTGGGGACTCTGGCCTTTGA | Chip strong | 15830 | 9.3586321 | 14.166217 | 5513 |
| GTTGGTTTAGCTGGCCCAT | Chip strong | 15833 | 22.509586 | 7.6416044 | 225 |
| TTGATGCCCGTCCGTACACT | Chip strong | 16077 | 20.144415 | 22.335653 | 253 |

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|-------------------------|-------------|---------|-----------|-----------|------|
| GCAGGGAACTGGCTGGCTTT | Chip strong | 16084 | 7.1124773 | 22.951672 | 203 |
| CATTGCACTCCAGCCTGGCAA | Chip strong | 16173.5 | 12.224211 | 19.366573 | 396 |
| GCCCCCGTAGTAGATGAGGC | Chip strong | 16235 | 27.099997 | 7.9834018 | 5078 |
| TCGCCCAGGCTGGAGTGCAGTG | Chip strong | 16241 | 17.047142 | 24.279329 | 5948 |
| GTTCAAGACCAGCCTGGCCAAC | Chip strong | 16360 | 17.522753 | 9.7908163 | 2075 |
| CGGTGCAGACAGCCCCCTCGT | Chip strong | 16512 | 20.916447 | 10.725959 | 1091 |
| ACCATCTCCTGTGCCTCCAGCT | Chip strong | 16520 | 12.522655 | 19.197701 | 47 |
| TGGGTTACGCCATTCTCCTGC | Chip strong | 16663 | 15.544313 | 7.4143276 | 2734 |
| AAGTGATACGCCCTGCCTCGGCC | Chip strong | 16691 | 9.2873106 | 2.0918362 | 257 |
| CACTGCAAGCTCCGCCTCCGG | Chip strong | 16707 | 18.91095 | 14.108605 | 3057 |
| GCCTGGCCAACATAGTGGGACC | Chip strong | 16749 | 8.6138811 | 20.486101 | 97 |
| TCCTGGCCATCCAGCCTGGGGA | Chip strong | 16778 | 7.2028656 | 18.973217 | 362 |
| CACTGCAAGCTCCGCCTCTGG | Chip strong | 16781 | 17.735508 | 9.1570225 | 2344 |
| TCCTCCAGAGCTTCATCCTGCC | Chip strong | 16927 | 20.0035 | 5.2284846 | 360 |
| GCGCCTGTGCCCTCTAA | Chip strong | 17094 | 12.760594 | 23.842529 | 1 |
| GGGGGCTTGGCCCGGTCTGGTT | Chip strong | 17107.5 | 8.3545551 | 12.59028 | 7463 |
| CTCCTTCTGGGCCTGGCAGTGG | Chip strong | 17180 | 8.0816298 | 15.63814 | 2934 |
| TCACTGCAGCCTCTGCCTCCCG | Chip strong | 17181 | 17.958405 | 9.3027229 | 3506 |
| TTGCCTAGGCTGGAGTGCAGTG | Chip strong | 17345 | 14.202718 | 24.599249 | 5848 |
| AGGCTGTAGTGCATGTGCTATG | Chip strong | 17379.5 | 8.1088619 | 26.406704 | 4507 |
| CTTGATTTGTCTCTGGCCCTG | Chip strong | 17456.5 | 9.4672995 | 8.272316 | 302 |
| CCTGTGGTCCCTGTCTGTGCCT | Chip strong | 17748 | 13.149311 | 10.342139 | 184 |
| CTGTACTTCAGCCTGGGT | Chip strong | 17781.5 | 10.784699 | 22.153023 | 7150 |
| ACTTGGAACTGGCCCTTCAT | Chip strong | 17782 | 14.512917 | 23.881441 | 263 |
| TTCCCTGGACTGGCCTGCACC | Chip strong | 17948.5 | 9.3010607 | 15.061718 | 137 |
| CCCACTGCTGCCCGGGCGCCG | Chip strong | 17950 | 21.138054 | 12.695562 | 6140 |
| AGCTCACCAACCTCCGCCCTC | Chip strong | 18085 | 16.008877 | 9.1603575 | 944 |
| GATTACTGGTATTGCTGGCTCC | Chip strong | 13394 | 25.892035 | 5.407784 | 91 |
| TGGCTCCCCGGAGTGCACATGT | Chip strong | 13507.5 | 16.857716 | 15.057426 | 660 |
| TCACTGCAATCTCAGCCTCTG | Chip strong | 13609 | 16.304766 | 12.973942 | 7035 |
| AGGTGGCCACAAGGTGGCTGGC | Chip strong | 13621 | 20.378857 | 17.680929 | 55 |
| GGCCGCTCTCCGGTGTGGATCT | Chip strong | 13720 | 8.1071081 | 18.136568 | 6571 |
| CAGGCGGTGGCTCCTGGCTGAG | Chip strong | 13762 | 7.9819422 | 4.232655 | 1936 |
| GGCTGCTGGCTTCAAGTGGG | Chip strong | 12604.5 | 21.291653 | 18.561375 | 343 |
| CCCCTGCTGTGCTTGCATGGCT | Chip strong | 12605 | 18.076384 | 11.74684 | 179 |
| TTAGGGTTACACCAGCCTCTG | Chip strong | 12631 | 7.6015825 | 2.2383578 | 2765 |
| TGGCTTAGTAATAAGTTCTC | Chip strong | 12660 | 16.773508 | 11.141039 | 131 |
| GCGCCTCTCGGCCCTC | Chip strong | 12734 | 7.9515629 | 6.2195482 | 3967 |
| TCTCTAGTCCTGCCTCCCC | Chip strong | 12753 | 19.169752 | 7.0407801 | 233 |
| GCTCCCTGGTAGGCCATGCTCTC | Chip strong | 12312 | 7.7381911 | 3.9085872 | 5854 |
| TTGTCACTGCACTCCAGTCTGG | Chip strong | 12372.5 | 9.9857264 | 24.029345 | 255 |
| GGGAAGCTGGTCACCCACAGGC | Chip strong | 12450 | 11.913556 | 20.388573 | 107 |
| TCACTGCAAGCTCCTCCTCCTG | Chip strong | 12173.5 | 21.173698 | 8.2767439 | 5302 |
| ATGCCACTGCGCTCTAGCCTGG | Chip strong | 12177 | 8.2681303 | 19.851286 | 2897 |
| TTGATTTCTTGCTGCCCTCA | Chip strong | 12258 | 23.24996 | 2.8578236 | 2417 |
| GCCCAGGCTGGAGTGCAGTGGT | Chip strong | 12883 | 15.701074 | 24.210485 | 3079 |
| CTCCTTGCTGGTCTGGTGAAT | Chip strong | 12887 | 13.768332 | 6.9087734 | 190 |
| GGCCCAGGCTGGAGTGCAGTGG | Chip strong | 12915 | 16.751265 | 19.536619 | 5845 |
| CGCCCAGGCTGGAGTGCAGTGG | Chip strong | 12926 | 16.758549 | 20.787756 | 5443 |
| TGGGTCTCTGGCCACCCAGCC | Chip strong | 12948.5 | 8.0436459 | 19.699574 | 369 |

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|-------------------------|-------------|---------|-----------|-----------|------|
| TCTGCCTTTACTAGCTGGATG | Chip strong | 12954 | 6.649405 | 9.6133747 | 2845 |
| CACGCCTGTAATCCCAGCACTT | Chip strong | 13062 | 15.57386 | 18.50495 | 5943 |
| CCCCTACACACCCCTTGGCA | Chip strong | 13065.5 | 14.729295 | 7.0756011 | 2210 |
| CTCTGCCAGCGGGCTGCGCT | Chip strong | 13140 | 7.6419506 | 17.506365 | 6926 |
| CGCGAGCGGGACCTGCGCCTG | Chip strong | 13179 | 8.3394403 | 5.5586901 | 79 |
| GCTCACAGCCTCCCCGGCCTG | Chip strong | 13198 | 7.8765292 | 3.4258959 | 98 |
| ATTGTACTCCAGCCTGGGTGAC | Chip strong | 13270 | 14.992455 | 24.968328 | 7974 |
| TTTGGTCCCCCTCAACCAGCTA | Chip strong | 13310 | 7.6353297 | 18.880299 | 141 |
| TTGCTAGTGTGTTGGTTGATGGT | Chip strong | 13321 | 29.278065 | 21.353354 | 254 |
| TGGGTCTGGCTGAAGATCTCT | Chip strong | 13345 | 7.4858232 | 22.909485 | 368 |
| GCACTGGCCGCACCGTAGGGC | Chip strong | 11799 | 10.682883 | 23.348194 | 3659 |
| AGCAGAGCAGTCTCCGCTCA | Chip strong | 11919 | 6.4712315 | 22.303505 | 146 |
| AGAAAGTGCTTCCCTTGGACT | Chip strong | 11968 | 7.2289524 | 23.562014 | 3761 |
| TCTCTTGCCTGCTGCCATCCA | Chip strong | 11985 | 23.580763 | 9.5384855 | 7553 |
| TCTGCCTCCAGGAGCTGGCA | Chip strong | 12022.5 | 6.4897313 | 19.629604 | 363 |
| AGCCCAGGCTGGAGTGCAGTGG | Chip strong | 12054.5 | 14.262013 | 20.370312 | 7591 |
| CTCTGATGTCTGCCCTCACCT | Chip strong | 12084 | 23.231821 | 2.7038672 | 300 |
| TGGTGGAGGCGCTGCTGCCAG | Chip strong | 11424 | 10.211181 | 12.62489 | 133 |
| ATTGCACTTCAGCCTGGGTGAC | Chip strong | 11488.5 | 11.742085 | 23.617636 | 2330 |
| TTGCCAGGCTGGAGTGCAGTA | Chip strong | 11492 | 11.738238 | 20.495441 | 6041 |
| GCCTCAGTCTCCGAGTAGCTG | Chip strong | 11503 | 10.848304 | 18.821283 | 3634 |
| CGCCTCCTCTGTCCTGATT | Chip strong | 11564 | 15.306285 | 4.1242805 | 321 |
| AGGTGCTCTGTGTATGCATAGA | Chip strong | 11593 | 19.340197 | 19.182079 | 273 |
| CCTGGTTCAAGTGATGCCCT | Chip strong | 11617.5 | 9.2222452 | 3.8587017 | 7564 |
| GGCCGTCCCTAGAGATGGGGTT | Chip strong | 11689.5 | 8.4446125 | 7.2657032 | 104 |
| GCCGGGCCGGGTTGGCCG | Chip strong | 11714 | 7.709898 | 8.2685728 | 4568 |
| CATTATTCTCAGTTCTGTGCAG | Chip strong | 11732.5 | 27.869678 | 16.957344 | 285 |
| TGGTTCCCTTTGGCCTCTCC | Chip strong | 10935 | 11.08107 | 6.0971227 | 37 |
| TGACCTCATGATCCGCCACCTC | Chip strong | 11003 | 34.517956 | 15.899262 | 1030 |
| CTGGCCCCTTTCATTCTGGAAAG | Chip strong | 11008.5 | 19.356289 | 14.29258 | 196 |
| TCACTGCAAGCTCCGCCTCCG | Chip strong | 11075 | 27.798988 | 5.425684 | 4696 |
| CTGGCTCTCAGGCTGGTCCCCA | Chip strong | 11103 | 17.197889 | 7.7209744 | 520 |
| TCTGTGCTAGGCAGCCTGGCCC | Chip strong | 11107 | 23.362293 | 13.677877 | 2014 |
| GCGTCCCCATATCCAGCCGTA | Chip strong | 11126 | 18.896269 | 4.5503421 | 3653 |
| ATAGCAGCGCTGCCCTCTGCC | Chip strong | 11135.5 | 8.3489428 | 16.26886 | 58 |
| CATGTGCTTGCTGCCCTCCAT | Chip strong | 11157 | 17.133692 | 10.310522 | 2861 |
| GAGGCAGGAGGATTGCTTGAGC | Chip strong | 11218 | 8.9163761 | 23.396725 | 6344 |
| CTGCACTCCGCCCTGGGC | Chip strong | 11228 | 7.6034174 | 5.8922038 | 3582 |
| TGCAGCATTGCACTCCAGCCTG | Chip strong | 11232 | 11.505449 | 21.076042 | 6386 |
| AGCTCAATGCAACCTCCGCC | Chip strong | 11240 | 15.547588 | 6.5624309 | 7557 |
| TGCAGCCTCTGTTAGCCCC | Chip strong | 11243 | 17.256807 | 2.5227482 | 237 |
| GGGTCTCTGTTGGCTTCTT | Chip strong | 11264.5 | 7.8554482 | 5.5741806 | 12 |
| AGCCTCTGGCCTTTTCCCT | Chip strong | 11308.5 | 17.074085 | 5.3993454 | 53 |
| AGCTGGTTAACATGCTGTCTG | Chip strong | 11390 | 14.25641 | 8.7015753 | 267 |
| CACTGCCCTGGCACCTATCCT | Chip strong | 10671 | 9.1234684 | 14.108407 | 63 |
| GCCTGGTGGTTGGTAGT | Chip strong | 10696 | 15.110422 | 8.3110876 | 310 |
| GTGGTAGCTCCAGGCTGTCTGA | Chip strong | 10711 | 30.533655 | 22.150589 | 222 |
| TGCTCTGATTTTGGCCAGCT | Chip strong | 10768.5 | 14.230415 | 7.0602937 | 244 |
| TCCTGGCTTGGCTTGGGG | Chip strong | 10813.5 | 7.7058806 | 7.1675959 | 125 |
| TCCACTGTCCCTGGCACTTT | Chip strong | 9134 | 6.4327211 | 12.8872 | 356 |

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|-------------------------|-------------|---------|-----------|-----------|------|
| CGCCATGTCCAGCGTCTCGGG | Chip strong | 8765 | 20.334946 | 20.485155 | 186 |
| CAGGCTGGAGTGCAGTGGTGC | Chip strong | 8766 | 16.20937 | 18.915073 | 2503 |
| CATTGCACTCCAGCCTCCCATA | Chip strong | 10435 | 16.077471 | 9.6274853 | 287 |
| AGAGTCTCCCTGTGTTGCCCTG | Chip strong | 10467 | 7.4270558 | 12.602409 | 145 |
| TCCTTCCTCTGTCAAGCAGGCC | Chip strong | 10471 | 20.063852 | 2.295146 | 26 |
| CTGAGCTCACGCCATTCTCCTT | Chip strong | 10524 | 16.186312 | 18.177279 | 2521 |
| TCACCAGCTCTGCCCTGCCAGT | Chip strong | 10572 | 6.2146297 | 17.905064 | 4745 |
| ACTGCACTGCAGCCTGGCCAAC | Chip strong | 10584 | 7.3915148 | 12.856659 | 162 |
| TTCTTCTGCCCTTGCCCTGACA | Chip strong | 10593.5 | 16.647232 | 9.2061243 | 139 |
| CCAGTACGTTGCTCAGCTCCTC | Chip strong | 10610.5 | 11.484417 | 2.7025924 | 70 |
| CGCCGCCCTCCGAGGACTCCTT | Chip strong | 10614 | 8.6334085 | 6.5864415 | 320 |
| CTCCAGTTGGCCCCAGTTGGTT | Chip strong | 10654 | 12.255802 | 17.910707 | 7192 |
| CACTGCAGCCTCTGCCCTCAG | Chip strong | 10661 | 14.481808 | 12.50426 | 5974 |
| TGTCCAGGCTGGAGTGCAGTGG | Chip strong | 9691 | 12.871147 | 16.345312 | 3738 |
| CCTGTAATCCCAGCTACTCGGG | Chip strong | 9691.5 | 10.661835 | 14.316287 | 5299 |
| GCAAAAGTAGTGCTGGTTAGG | Chip strong | 9711 | 21.974758 | 16.433075 | 7594 |
| TTGCTCAGGCTGGCGTGCAATG | Chip strong | 9724 | 11.115126 | 19.742767 | 378 |
| CCCGCGATCTCCTTGTGGCCGT | Chip strong | 9728 | 11.945862 | 6.9863696 | 289 |
| GTCCCTGAGCCTGGCATTCCC | Chip strong | 9774 | 7.691021 | 2.3762388 | 990 |
| TCAAGTGATTCTCCTGCC | Chip strong | 9836 | 15.970009 | 19.168186 | 4396 |
| TCACTGCAAGCTCCACCTCCCG | Chip strong | 9843 | 15.895414 | 13.694772 | 3100 |
| CACCTGGCTGGCAATTATAAT | Chip strong | 9852 | 8.0965796 | 17.484594 | 281 |
| TCAGGGCTGCACTGGCTGGTCT | Chip strong | 9852 | 10.620815 | 11.96568 | 355 |
| TCCCCTCTTGCTGTTGTCTGCG | Chip strong | 9875 | 9.3104095 | 2.2802107 | 7816 |
| TTGCTGCTCTGCCGGTACAGCT | Chip strong | 9885 | 6.0708628 | 22.70689 | 605 |
| CAGGAGGATTGCTTGAGGCCAG | Chip strong | 9887.5 | 8.4761457 | 19.047802 | 3921 |
| GGCTCCTGGGGGTGCTCCTGCC | Chip strong | 9895 | 9.94205 | 8.883275 | 4474 |
| TGGAGTTGGCTGCAGATGAGTC | Chip strong | 9954 | 13.087917 | 15.585505 | 249 |
| TGCCCTGGCTCTTCTTGTCCA | Chip strong | 9983 | 8.4301682 | 12.997806 | 837 |
| TCAAGCAATTCTCCTGCCCTGGC | Chip strong | 10092.5 | 16.702658 | 19.82888 | 5111 |
| TGCCTAGGTCTGGCCTCCTGG | Chip strong | 10161 | 16.315468 | 2.7759731 | 31 |
| TCTGCGGTCCCCTCTGCCCT | Chip strong | 10190 | 10.797435 | 8.6208448 | 2501 |
| GCCAGCCTCCATCCTCCCTG | Chip strong | 10191 | 21.391727 | 11.342846 | 94 |
| TCCCCTCTGGCTTGGCCAGA | Chip strong | 10285 | 8.0190945 | 16.142628 | 229 |
| GGTCCCTCTGGCTACTCCCC | Chip strong | 10302.5 | 7.4917507 | 16.076124 | 111 |
| AGGGAAAGGACTGCTGGTTGGC | Chip strong | 10310 | 6.749754 | 2.3204882 | 149 |
| CACTGCAACCTCCATCTCTGG | Chip strong | 10365 | 13.339122 | 12.537156 | 4927 |
| CATGCCTGTAATCCCAGCACTT | Chip strong | 10382 | 14.765577 | 17.657774 | 7236 |
| CTCCTGCTTCACGGGCACCGCC | Chip strong | 10401.5 | 13.866408 | 2.1750216 | 893 |
| GCTGAACGAGCTGGCCAAGTTC | Chip strong | 9451 | 6.6551905 | 19.321331 | 209 |
| CAGCCTCTATGCCCGTCACC | Chip strong | 9484 | 16.652414 | 11.957335 | 65 |
| CGCCCAGGCTGGAGTGCAGTGA | Chip strong | 9513 | 14.644378 | 17.344313 | 6683 |
| GCCCCGGCCCGGGGTG | Chip strong | 9597 | 6.2839761 | 20.307545 | 5715 |
| ACTGTACTCCAGCCTGGTGGCA | Chip strong | 9608.5 | 7.5143518 | 22.582787 | 2492 |
| ACCCCGCTCCTGCAAGCCTCTG | Chip strong | 9609 | 6.7912097 | 4.80404 | 48 |
| CTCTTGGTTGGCTCTGATGC | Chip strong | 9661 | 15.128378 | 18.743273 | 194 |
| CAGGTTCAAGCGATTCTCCTGC | Chip strong | 9179 | 16.397514 | 14.266402 | 3160 |
| AATGGTCTTTGTTCCCTGCT | Chip strong | 9183 | 7.6419687 | 3.2526188 | 44 |
| GGGAGGCAGTGCCTGGAGGCTGG | Chip strong | 9212.5 | 9.3155737 | 13.897033 | 6632 |
| AGTGTGGCTGGCTGGCTGCC | Chip strong | 9220.5 | 15.521686 | 7.1320724 | 151 |

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|-------------------------|-------------|--------|-----------|-----------|------|
| CCTCCAGAGGGAAAGTACTTTCT | Chip strong | 9249.5 | 6.6212044 | 18.540237 | 3037 |
| CTCGTGATCCGCCAACCTCAGC | Chip strong | 9254 | 12.490854 | 15.083214 | 5888 |
| CCCTGGCTGATACCGGAAAGGC | Chip strong | 9281 | 7.5079288 | 7.661869 | 5307 |
| TCCTGCCGTCCCTCCGGGCCTC | Chip strong | 9326 | 11.404112 | 5.8492618 | 3729 |
| ATTTACATACCCAGCAGCCTCC | Chip strong | 9344 | 14.651403 | 5.7202735 | 154 |
| ACCTTGTGATCCACCTGCTTTG | Chip strong | 9350 | 10.149202 | 4.1434402 | 49 |
| TGCCAGTATCCTCTGAGACCC | Chip strong | 9374.5 | 18.697142 | 19.309006 | 239 |
| ATCTCAGCTCTGCCTCCTGGGT | Chip strong | 8963 | 12.361974 | 12.799247 | 169 |
| TCCTCCCTCACCTCAGTCTGGG | Chip strong | 8976.5 | 11.361602 | 9.0995693 | 361 |
| AGGGAAATCTCAGCTCTAAAAT | Chip strong | 8991 | 16.352005 | 20.399546 | 670 |
| TAGCTGAGCCGCCCTGGCTGGGG | Chip strong | 9026 | 6.8317003 | 8.4015751 | 350 |
| GCCCCCTGCCTTGAACCTGGAG | Chip strong | 9052 | 22.034313 | 3.550808 | 916 |
| TCACTGCAAGCTCTGCCTTCCG | Chip strong | 9055 | 9.7306767 | 11.763208 | 1093 |
| CCTCTTCACCGTGCCTGTCCC | Chip strong | 8800 | 16.616077 | 5.438931 | 183 |
| ACTTGCTGGCTCCTTGCTTCTA | Chip strong | 8816 | 12.372648 | 16.758364 | 2044 |
| ATGCCTGTAATCCCAGCACTTT | Chip strong | 8871 | 12.921462 | 20.372988 | 7378 |
| ACTGTACTCCAGCTCTGGGTGA | Chip strong | 8927.5 | 10.2185 | 21.731802 | 3711 |
| TCCAGGCCCTCAATCCATTCCA | Chip strong | 8934.5 | 13.815792 | 9.5553522 | 24 |
| CCAGACCCTCCATTCAAGCTCC | Chip strong | 8423 | 9.3362026 | 7.7677507 | 3455 |
| TCACATCTAATTCCATTCTGC | Chip strong | 8429 | 13.263923 | 4.5787411 | 6148 |
| TTCACCATGTTGGCCAGGCTGG | Chip strong | 8459 | 15.33227 | 11.28218 | 3680 |
| CAGGCTGGCTCCCTGAAGGTTC | Chip strong | 8459.5 | 6.1472831 | 17.683357 | 68 |
| AGGCCCCCTCCACCCATTCTGG | Chip strong | 2151 | 8.4221792 | 7.0899777 | 3350 |
| GTCTTTGCTAGCCAGAGAGCT | Chip strong | 2153 | 8.0217466 | 10.245297 | 5068 |
| TGCTCTGTTGGCTTCTTTGTC | Chip strong | 8407 | 17.417171 | 17.734081 | 367 |
| GACCTTGTGATCTGCCACCTT | Chip strong | 8467 | 31.729177 | 18.925035 | 6075 |
| CACTGTCTCCTTGGCTCCTC | Chip strong | 8497 | 10.860129 | 11.864268 | 175 |
| CGCGCTCTCCTCTGGCACCCA | Chip strong | 8509 | 6.424386 | 19.448072 | 1394 |
| AGCACGGTGGGTTGGCTGGCA | Chip strong | 8532 | 8.91047 | 7.0811062 | 163 |
| GTCCTCACTGGCCGCACGCTGA | Chip strong | 8536 | 7.1346483 | 19.281561 | 348 |
| CCAGGCTGGAGTGCAAGCAGCA | Chip strong | 8552.5 | 11.002619 | 19.600433 | 69 |
| TCTCGCTCTGTCGCCAGGCTG | Chip strong | 8558 | 11.966861 | 10.057902 | 4462 |
| CGGTGCCTCCTCCAGTGTGCT | Chip strong | 8559 | 10.886886 | 9.833169 | 187 |
| GTCAGTCATTGAATGCTGGCCT | Chip strong | 8592.5 | 23.067156 | 11.230301 | 15 |
| CTGGAGCAGACAAAAGG | Chip strong | 8594 | 11.848651 | 3.8546574 | 7322 |
| CCTTTATCCCCCTAATTGGCCT | Chip strong | 8596 | 19.616385 | 9.8835402 | 185 |
| ACCAGCCTGGCCAACATGGCAA | Chip strong | 8606 | 8.2232008 | 18.60726 | 5502 |
| GCCTGTAATCCCAGCACTTG | Chip strong | 8675.5 | 12.842025 | 14.392535 | 6975 |
| CAACATGGTGAAACCCGTCTC | Chip strong | 8706 | 11.270616 | 12.27146 | 2466 |
| TGGTAGGTTGGCAGTTC | Chip strong | 8731.5 | 31.377066 | 20.530041 | 36 |
| AACCCAGGAGGCGGGAGGTTGT | Chip strong | 2145 | 23.003139 | 12.273234 | 4480 |
| GTGTTCTGTGCTGGATGGTCA | Chip strong | 2131 | 11.864914 | 6.3784571 | 349 |
| CATCCAGGCTGAAGTGCAGTGG | Chip strong | 2134 | 8.2575912 | 10.422696 | 3672 |
| GTGGCCCAGGTTGGAGTGCAGT | Chip strong | 2135 | 12.333922 | 6.7368903 | 6070 |
| CAGGCTGAAGTGCAGTGGTGT | Chip strong | 2136 | 8.2628632 | 9.4549208 | 2215 |
| AGCCAATCCTAGCACTTGAG | Chip strong | 2126.5 | 6.5217991 | 3.5096016 | 1650 |
| CCCAGGAGGTCAAGGCTGCAGT | Chip strong | 2036.5 | 6.6226544 | 11.643046 | 6105 |
| CAGTGCACGGGCCAGTCCTGCC | Chip strong | 2112 | 9.479496 | 10.392011 | 5812 |
| CCCTCGTGCATCCATCATTAG | Chip strong | 2096 | 18.148672 | 2.2716882 | 3353 |
| CAGTCACAAGCGTACCTAATT | Chip strong | 2097.5 | 9.4896584 | 6.2945709 | 4291 |

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|-------------------------|-------------|--------|-----------|-----------|------|
| TCAACTGCTCTGGGAAGGTCCCC | Chip strong | 2092 | 6.2979813 | 3.0802057 | 6586 |
| TGGCTAGGCTGGTGTCAAGCTC | Chip strong | 2082 | 6.3935094 | 7.687212 | 3980 |
| TACTGCGCCTTACCAAGCGGC | Chip strong | 2073 | 6.069356 | 2.6888943 | 4687 |
| CCTCTGCACCAACCTGTCAAGA | Chip strong | 2057.5 | 11.429537 | 3.11975 | 182 |
| GTCCAGTTGTATGTCCAGTGTC | Chip strong | 2058 | 8.4334011 | 5.2194672 | 7982 |
| TGGAGGCTGGAGTGCAGTGGCG | Chip strong | 2034.5 | 7.5323806 | 10.788618 | 5179 |
| CTAGGCTGGAGTGCAGTGGCAC | Chip strong | 2019.5 | 7.9472141 | 11.208291 | 936 |
| CATTGCACTCTAGTCTGGGTGA | Chip strong | 2023 | 22.883551 | 8.942131 | 4671 |
| CCACGGGCAGATGTGGTGGTT | Chip strong | 2023.5 | 6.754149 | 4.0614367 | 1352 |
| GGAATAGCCTCCTGAECTCA | Chip strong | 2002.5 | 6.5753565 | 10.616139 | 6566 |
| TGGAGACACAGGACCAGACTGC | Chip strong | 2004 | 6.981535 | 2.3005965 | 2557 |
| AGCCAGGCCAGCAGGTATGC | Chip strong | 2011 | 11.254579 | 11.186662 | 1552 |
| GAGGCTGAGGTTGCAGTGAGCT | Chip strong | 1999 | 6.8439331 | 8.8330622 | 624 |
| CTTGGTGTGGCAGAG | Chip strong | 1915.5 | 6.6816697 | 10.771432 | 6439 |
| GTTGGCCAGGCTGGTCTCAAAC | Chip strong | 1993.5 | 6.9299874 | 2.2314062 | 2785 |
| GCTCAAGCCTTCTGCCACCTC | Chip strong | 1983.5 | 16.233715 | 7.6688213 | 2703 |
| GCTGGCAGACTCCTCTGGAAC | Chip strong | 1985 | 9.0118723 | 2.4699371 | 6314 |
| GCCATTCACACAGACATTG | Chip strong | 1978.5 | 6.6882792 | 9.8837452 | 5604 |
| TAGGTTACAGCCAGCCAG | Chip strong | 1963 | 10.949057 | 11.221157 | 1987 |
| ACCCAGGCTGGAGTGCAGTGAT | Chip strong | 1941.5 | 7.7255301 | 11.090164 | 5048 |
| GGGCGGATCATTGAGGTCAGG | Chip strong | 1943.5 | 6.9547186 | 9.5280085 | 6956 |
| TCTAATCCTATGGTGGGGAGGG | Chip strong | 1947 | 8.5338745 | 6.3978777 | 3770 |
| CTGGGAGGCAGAGGTTGCAGTG | Chip strong | 1910 | 6.9613633 | 10.357609 | 7980 |
| AGGGGCTCCTTGTGCTGCGTC | Chip strong | 1911.5 | 7.5021071 | 5.5356297 | 6327 |
| GGCCCCGCAGACCCAGCACGT | Chip strong | 1905.5 | 6.5486112 | 6.9167981 | 7942 |
| CCAGGCTGGAGTGAATGGCGT | Chip strong | 1892 | 6.8911996 | 11.028392 | 5440 |
| CTGTCCTGGGGAAAGCCAGCCC | Chip strong | 1892 | 8.5004892 | 5.7830157 | 2319 |
| GGGGAAAGCCAGCCCTGCTTCC | Chip strong | 1892.5 | 6.826138 | 6.2401505 | 2001 |
| GGAGGTACTGTAGCTGGCGTT | Chip strong | 1877 | 10.634505 | 9.6884193 | 103 |
| GAATTTTATTACTAGTCAACTG | Chip strong | 1889 | 7.8809133 | 3.6355321 | 2276 |
| GAGGCAGGGCAGATCACCTGAGG | Chip strong | 1864 | 6.033988 | 5.7446184 | 1396 |
| CCCAGGAGGTGGAGGCTGCAGT | Chip strong | 1868 | 6.0943484 | 7.1866341 | 6272 |
| CAGCCTGTAGTCTGGTCCAGGT | Chip strong | 1863 | 11.233044 | 10.847687 | 1563 |
| CTTAGCTCGGGGCCCTCCTCGC | Chip strong | 1856 | 6.910593 | 2.521337 | 3308 |
| AGTGCACTGGCACCATCTCAGC | Chip strong | 1852 | 10.573176 | 7.9208889 | 7038 |
| TGCCTAGGCTGGAGTGAATGG | Chip strong | 1842 | 20.142548 | 7.6070156 | 2928 |
| TGGGGCCATCTCACCCACTGTT | Chip strong | 1828 | 9.8785877 | 4.2386732 | 1399 |
| AAGTGCTGGGATTACAGGCATG | Chip strong | 1812 | 7.3370275 | 10.102645 | 4558 |
| GGCGTGGCGAGGTGCTCTATC | Chip strong | 1796 | 7.1220169 | 4.9086099 | 3860 |
| TAGCACAGGGCTCCTCAACCCA | Chip strong | 1806 | 7.8335514 | 5.4125681 | 8128 |
| GGTGTCAAGACTTGCATATCCT | Chip strong | 1808 | 6.4814534 | 9.6383839 | 7821 |
| CTTGCTGCCAGCCACCATACTG | Chip strong | 1793 | 6.5887036 | 2.1328712 | 465 |
| CTGTGGATCTAGAGGGGCCATA | Chip strong | 1775 | 6.2498932 | 3.5819983 | 2056 |
| AAGGTGGGTGGATCACGAGGTC | Chip strong | 1791 | 6.7066569 | 9.7404299 | 1298 |
| CGATGGTATCGGCCAGCCCCGG | Chip strong | 1767 | 10.267977 | 3.1429348 | 4051 |
| ACTATAGATGCTGGCGAGGCTG | Chip strong | 1628 | 7.8868184 | 9.2165308 | 5750 |
| GTATTAGTTCTGTGCTGCT | Chip strong | 1680 | 9.3465014 | 4.5677662 | 3329 |
| CTAGAGTGCAGGTGTATGGTTA | Chip strong | 1669 | 7.7501578 | 4.8546963 | 6491 |
| ACCCAAGTTTCCATGCCTGTT | Chip strong | 1669 | 9.7604237 | 6.790926 | 4650 |
| ATGTCATATCCCCATTCTGAT | Chip strong | 1760 | 8.5004892 | 7.7344885 | 5589 |

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|-------------------------|-------------|--------|-----------|-----------|------|
| TACAGCCTGGCACTACCCTGGG | Chip strong | 1762 | 6.7435856 | 8.5499544 | 840 |
| GTGCTTGCTGGAATCGAGGAA | Chip strong | 1710 | 10.403996 | 8.5636625 | 115 |
| GAGTGCAGTGGCGTGATCTCTG | Chip strong | 1660.5 | 23.444746 | 5.7436481 | 3428 |
| CATTGCACTGCAGCCCGGGCAA | Chip strong | 1619.5 | 6.7378373 | 4.1009598 | 4652 |
| AAGGCTCGGCAATGTGCGGGCTC | Chip strong | 1617 | 6.3867145 | 5.1396852 | 6339 |
| TGCATTTCCCATTGTGCGGCTC | Chip strong | 1610 | 11.002058 | 8.2858639 | 1584 |
| ATTGTACTCTAGCCTCTGGGCA | Chip strong | 1599 | 22.001442 | 5.7389541 | 5442 |
| CCAGGAGTTGGAAGCTGCCATG | Chip strong | 1605 | 25.695589 | 4.5739975 | 4124 |
| GCCCAGGCTGGAGTCAGTGGT | Chip strong | 1573.5 | 6.542747 | 8.0195217 | 2998 |
| GCAGGTGGATCACCTGAGGTCA | Chip strong | 1573.5 | 6.542747 | 9.5370836 | 5775 |
| AGCCTGGTTAACGCATTTATA | Chip strong | 1553 | 12.683311 | 6.2985649 | 5347 |
| GCCATGACTCTCCATACCAAAG | Chip strong | 1592 | 6.0272546 | 8.5714464 | 1270 |
| CAAAGTGCTAGGATTACAGGCG | Chip strong | 1593 | 7.9515629 | 8.8260517 | 4626 |
| CAAAGTGCTAGGATTATAGGTG | Chip strong | 1570.5 | 9.1333447 | 8.6484661 | 6342 |
| TCTTTCTTGTGGGTGCCCTTT | Chip strong | 1545 | 6.3253627 | 3.1718905 | 3371 |
| ATGTTGGCCAGGCTGGTCTTGA | Chip strong | 1527 | 7.2414885 | 7.5854573 | 3272 |
| TAGAAAAGCCCCAGCTGGAGGG | Chip strong | 1517 | 6.2085018 | 4.9604745 | 3167 |
| TGGGAGGCCGAGGCAGGTGGAT | Chip strong | 1509 | 6.3071833 | 8.9423923 | 3752 |
| TGAGGCAGGCCGATCACGAGGTC | Chip strong | 1475 | 6.1789246 | 8.965416 | 1961 |
| AATGTGTTGAATAAATTGTGCC | Chip strong | 1493 | 7.7202153 | 3.8070927 | 2372 |
| GGCTCTGCTTGAGGCCAGCCTG | Chip strong | 1496 | 8.5616169 | 2.8241165 | 2295 |
| AGCGTGTGAGGAGCTGCAG | Chip strong | 1410 | 9.0065594 | 8.8227701 | 164 |
| AGGCAGGAAGATGGCCCCATAGA | Chip strong | 1471.5 | 6.9170618 | 3.567507 | 4824 |
| TGCCTAGTTCTGTATTACAGT | Chip strong | 1442 | 7.7322025 | 7.1628423 | 6223 |
| AAAGTGCTGGTATTACAGGTGT | Chip strong | 1430 | 8.6389112 | 8.4515057 | 7189 |
| TCTTGCTATTGTGAATAGTGC | Chip strong | 1391 | 23.491186 | 6.3724418 | 8140 |
| TAGCATGGCTCTATGGAACA | Chip strong | 1393 | 10.196934 | 8.9662762 | 19 |
| AGGAGGGGTTCTCGGGTGCTGA | Chip strong | 1395 | 7.4959846 | 3.0751243 | 5315 |
| GTATTGGAAACCACCACTGCC | Chip strong | 1363 | 7.8097911 | 4.1715727 | 6039 |
| GCTGCACAGACTGCTCTTTA | Chip strong | 1312 | 8.9211893 | 4.6518488 | 7352 |
| AGGTCACATACAAATGCTCCTT | Chip strong | 1357.5 | 10.797435 | 2.6732337 | 7601 |
| CCAAAGTGCTAGGATTACAGGC | Chip strong | 1345 | 13.303038 | 8.4856577 | 2942 |
| AAAGTGCTGGATTACAGGCAT | Chip strong | 1350 | 12.683311 | 10.389113 | 555 |
| GGCCAAGTGGATGCTGGTTAGC | Chip strong | 1351 | 6.3048329 | 7.5876508 | 6 |
| AAGACCAGCCTATGTTTCCAT | Chip strong | 1307 | 6.3594904 | 4.4498701 | 550 |
| CCACCTGAGATAAGAGAGCTA | Chip strong | 1308 | 8.4109449 | 3.6287591 | 5297 |
| TGACATTTCTAGTGCTTGTG | Chip strong | 1338.5 | 7.1093221 | 8.5563574 | 543 |
| CTGGCAGGTTATAGAGCTGCC | Chip strong | 1302 | 7.096612 | 5.6983724 | 7000 |
| TAGGTATAGGATTCTAGGTTGG | Chip strong | 1295 | 6.1877456 | 2.5713561 | 4519 |
| TTGCACTCCAGTCTGGAACAA | Chip strong | 1228 | 10.3373 | 8.1745329 | 6161 |
| ATCATTAAACAGTGCAGGGTAGG | Chip strong | 1291 | 6.7080827 | 6.8988318 | 1590 |
| ACTGTCCGGGACAGGCCATCC | Chip strong | 1271 | 9.39785 | 2.6795073 | 1149 |
| TTGCTTGCACTGCCTATAGGA | Chip strong | 1273 | 6.826138 | 5.0606236 | 5174 |
| TCCCACACAGCCCCGTCACCGG | Chip strong | 1251 | 17.608366 | 7.0673199 | 1843 |
| ACCCGCGAGTCTCACTGCCGCT | Chip strong | 1223 | 6.4206467 | 4.2665486 | 5718 |
| TCCAGTCGGATAACTAGACGGT | Chip strong | 1198 | 8.0100813 | 7.3187399 | 4126 |
| CTGGGAGGCAGGAGGTTGTAGTG | Chip strong | 1198.5 | 12.429611 | 5.9505429 | 6203 |
| AAAGTAATTGTGGTTCTGCCA | Chip strong | 1222 | 8.0042439 | 4.652194 | 3786 |
| TATTGAGACCAGTGCCTGCTTA | Chip strong | 1212.5 | 10.770452 | 7.2894559 | 896 |
| GCTTTGAGGTCTGCTCAGCC | Chip strong | 1197.5 | 6.7212648 | 2.5839851 | 5258 |

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|-------------------------|-------------|--------|-----------|-----------|------|
| TAGATATTCTACTGTGGATTA | Chip strong | 1183.5 | 14.757196 | 7.0838003 | 3968 |
| CACCAAGATGGCTCTAGTC | Chip strong | 1185.5 | 6.8000164 | 6.9032326 | 7571 |
| GTAGCTCTTTAAAGTTCTT | Chip strong | 1147 | 7.4468746 | 3.0822921 | 2424 |
| CAGCTGCTGTTCAGTTGTT | Chip strong | 1104 | 12.831322 | 5.0422101 | 5097 |
| CTCTGTAGAAAGAGGCCAGGTG | Chip strong | 1166 | 10.625381 | 5.0621781 | 7435 |
| ATGTGAGTGCTATGATAGACAG | Chip strong | 1139 | 8.0798817 | 5.4914975 | 3171 |
| TTGCCCACTGGCTGTTGGTCAG | Chip strong | 1139 | 8.8728657 | 2.6126466 | 816 |
| GTGTCGTATGTAATATGGCCA | Chip strong | 1094 | 6.6816697 | 4.5326276 | 2249 |
| TGCAGAAACAAGCCATCATTCA | Chip strong | 1094 | 6.8781896 | 4.4873405 | 7971 |
| TGCGCGGCTCAGTCATCTCCAG | Chip strong | 1089 | 7.5143423 | 5.1979566 | 1747 |
| GACGAGAGACTCCATCCACCAC | Chip strong | 1036 | 6.9557924 | 5.046813 | 7442 |
| GGTGGCAGTAGCACTGGGCCTG | Chip strong | 1077 | 6.041307 | 2.6370835 | 1175 |
| CCCCAGGGACGTGGCCCTCATAG | Chip strong | 1077 | 10.333858 | 5.4448314 | 5306 |
| CCCGCAGGTGGAGGTTGCAGTG | Chip strong | 1063 | 12.456565 | 6.3330817 | 5560 |
| TTGTATAGCCCAGAGAGTGAGA | Chip strong | 1038.5 | 17.09399 | 6.1502376 | 3479 |
| AACCCAGGAGTTGGAGGCTGTG | Chip strong | 1029 | 21.38809 | 5.8174529 | 5546 |
| ATGGAGTTGAGCTCTGTTGTCC | Chip strong | 1011 | 13.675286 | 3.3669057 | 2174 |
| GACCACTGGGGTGAGGGCCATC | Chip strong | 945 | 6.8911624 | 2.022193 | 721 |
| TTGCCAGTATTTTATTGATGA | Chip strong | 1009 | 12.247967 | 3.2183592 | 679 |
| CCCCGGAGGCAGGTTGCAGT | Chip strong | 992 | 11.842708 | 4.9079785 | 2394 |
| TCATGCCTGGAATCTCACCACT | Chip strong | 942.5 | 7.7381911 | 2.2637835 | 4362 |
| AACCCGGGAGGTGGAGGTTATG | Chip strong | 930 | 22.496128 | 4.8746562 | 3839 |
| CCTGTTTTACTGCAGTGAGT | Chip strong | 567.5 | 9.4845781 | 2.2011037 | 5430 |
| GAGAGATTACCACGCTTCTGA | Chip strong | 976 | 15.350301 | 3.126734 | 3648 |
| CCAGGAGTTGGAGGTTGCAGTG | Chip strong | 976 | 22.883551 | 4.4426494 | 2136 |
| AATGCTGAGTCCTGTGAGTCTT | Chip strong | 923 | 6.9686718 | 5.5901709 | 5112 |
| AGCATGGCCATCTGGCCGTCC | Chip strong | 878 | 6.1252327 | 2.8449426 | 5518 |
| AGCCCAGGTCCAGTTCACTGCA | Chip strong | 910.5 | 6.2636547 | 2.1727333 | 1599 |
| GACATTGCATGGTGGCCTCTT | Chip strong | 892 | 6.8000164 | 5.5174484 | 2153 |
| ATCCCAGGCGGCACAGGTTGCA | Chip strong | 894 | 9.5774403 | 4.2514043 | 415 |
| GTTTGAGATGGTTATTGCTCT | Chip strong | 874.5 | 10.573176 | 4.1083827 | 6846 |
| CCAGGAGGCAGAAGTTGCAGTG | Chip strong | 805 | 13.60638 | 2.6678605 | 2447 |
| GCCCCAGAGTTCAAGGCTGCAGT | Chip strong | 855 | 7.0224576 | 3.0866668 | 3435 |
| ATTCAGAGCACTGGGTAGAATT | Chip strong | 857 | 20.287172 | 2.8133147 | 1535 |
| ATTTACTCGTGCTTCATTGAAT | Chip strong | 800 | 20.287172 | 4.1256347 | 1068 |
| AATGGAATACCTAGGTGGCCCA | Chip strong | 778 | 8.4725876 | 2.240411 | 5484 |
| TGCCAGTCAGTTGGTGTGGGAC | Chip strong | 758.5 | 10.602533 | 2.6004431 | 6358 |
| CTGGGATGCGGAGGTTGCAGGT | Chip strong | 769 | 6.7378373 | 4.5273128 | 8074 |
| CAGCTGGCGACTCTCCTCGATG | Chip strong | 756 | 30.601658 | 3.5022452 | 7212 |
| CCAGTGGCTACAGGGGGTTGA | Chip strong | 730 | 9.0965214 | 2.7821243 | 6826 |
| ACCTGGAGGCAGAGGTTGCAGT | Chip strong | 733.5 | 17.302393 | 6.0039067 | 4004 |
| ATGCTTCTCTTAGTTCAATTGA | Chip strong | 735 | 13.751331 | 2.5685332 | 3869 |
| CTTAGTGACATGTATTCTTCAT | Chip strong | 737.5 | 6.6684384 | 2.0114207 | 1204 |
| CACTGGGAGCAGCTCCAACATT | Chip strong | 637 | 6.3526735 | 2.4190891 | 5142 |
| AACCCAGGGTGGAGGTTGCAGT | Chip strong | 637 | 13.824861 | 2.1190779 | 5499 |
| TTGCTTTTCCCAATGCAGT | Chip strong | 681 | 15.687518 | 2.9198182 | 2260 |
| CCCAAAGGTTGAGGCTGCAGTG | Chip strong | 729 | 17.317835 | 2.5729179 | 4827 |
| TGTGACGTTGTTCTGGATTCCC | Chip strong | 668 | 7.6298795 | 2.998491 | 499 |
| ACCCAGGCCATTGGCAAGAGTC | Chip strong | 628 | 9.279376 | 2.5574338 | 8015 |
| TTCAATAGAAAGTCCCTAGTTA | Chip strong | 581.5 | 10.366647 | 2.3806331 | 2080 |

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|-------------------------|-------------|-------|-----------|--------------|------|
| CCCAGGAGGCAGAAGTGCAGT | Chip strong | 614.5 | 19.606573 | 2.3651247 | 1139 |
| GCTGCAGTGAGCCAAGATCGTG | Chip strong | 561 | 10.3373 | 2.4339964 | 2490 |
| CCTGCACCACAAGGCTTCAGAG | Chip strong | 544 | 9.2326555 | 2.2861676 | 4457 |
| GCGACGCAGGCACGACGTGTTG | Chip | 407 | 4.3229294 | 0 | 1859 |
| TAGAACTACAAGCATTAAAAGT | Chip | 408 | 4.5837574 | 0 | 7756 |
| CATGTGAATTCCAAAGCTAGGT | Chip | 414.5 | 4.1733551 | 0 | 6454 |
| AGCTAGTATTCATTGAGGATT | Chip | 415 | 6.041307 | 0.24871261 | 7837 |
| GCTGCAGCTGTAGGACACAATT | Chip | 415 | 6.7934761 | 0 | 2632 |
| AGAAGTATCAGGAAGATTCTCA | Chip | 415.5 | 8.8620977 | 0.24693817 | 5796 |
| AAACTGACGGCATCTG | Chip | 416 | 12.831322 | 0 | 3419 |
| ATTGTCGTCAATGGACACATAG | Chip | 417 | 7.2854242 | 0.20856538 | 6748 |
| TGTGAGCAGAGACATGAAAAGC | Chip | 418 | 6.7212648 | 8.5594468E-3 | 7409 |
| TAACCAAGCAAACCTTCATTGT | Chip | 421 | 5.434535 | 6.8353221E-2 | 1198 |
| CTTCTCAAAGTTGTGAATCAGG | Chip | 421.5 | 4.1733551 | 0.35069525 | 6121 |
| TCATTACAAGATTCCAATTG | Chip | 422 | 4.0386124 | 0 | 3196 |
| TGAATAGAGCTGCAGTGGACAT | Chip | 422 | 5.1023388 | 0 | 6232 |
| GTGGCATTGCCTCTGCAGGAA | Chip | 422 | 8.4669981 | 0.18650818 | 7074 |
| ATGAGAGCTGATGACTTTACAA | Chip | 423.5 | 5.5248971 | 0 | 5923 |
| TGCCATAGCAATGGTAAGCTGA | Chip | 424 | 11.864914 | 0 | 3299 |
| TGAATATGTGACTTGATTCA | Chip | 426.5 | 6.5486112 | 0.25128219 | 7709 |
| TGCACGTGTGAGCATTCACATG | Chip | 427 | 24.615425 | 0.32512027 | 7233 |
| TTCCATACGACTGAGGTCTCGG | Chip | 428 | 5.9990945 | 0.16302724 | 4698 |
| TGTTTCTGTATGATCAATATTG | Chip | 428 | 9.4489527 | 0 | 5687 |
| AAGCATTTCAGGTAGAGATATT | Chip | 429 | 4.1566052 | 0.41299695 | 8038 |
| GACAGAGTGAGACCTGTCTTAC | Chip | 429 | 5.2922459 | 0.65576822 | 4597 |
| TAGTGGATGTTCAGAGATTGA | Chip | 430 | 4.0254292 | 0.20216984 | 1807 |
| TTGGATGGAGGTTCAAGCACTA | Chip | 430 | 4.0301342 | 0.61087269 | 7761 |
| TAACAAAGTATTGTTGTAT | Chip | 430 | 4.0977721 | 0.14321998 | 4929 |
| GTGAGGTGGTACAATATTAAC | Chip | 432 | 4.2171164 | 0 | 7494 |
| AAGATGATTATGTAGATTGGGA | Chip | 432 | 5.033093 | 0.19048747 | 5175 |
| ACTGCATTGGTAAAGTCAAGA | Chip | 432 | 15.687518 | 0.91610241 | 4313 |
| TTTTAAGTTGGATTGCTAAGTA | Chip | 435 | 5.8500195 | 0.70143706 | 1577 |
| TGGCAAGAACTGCAATTGCTTT | Chip | 436 | 8.0042439 | 0.56466776 | 5046 |
| ATTAATGAAACTTGGTAAGC | Chip | 436.5 | 5.7422438 | 0.56151348 | 4353 |
| AGCGTCAATATCGTCAACAGG | Chip | 436.5 | 6.6948843 | 0 | 5133 |
| TACTAGGAAGCAGCTGCATTGG | Chip | 437 | 5.7181096 | 0.59123063 | 7790 |
| AGGGAGCATTGTGACATATCAC | Chip | 437.5 | 4.8540587 | 0 | 7812 |
| ACCAGAAAGCTGGAGCACAAGGA | Chip | 438 | 12.68187 | 0.87860698 | 7067 |
| ATGGCATTGAATCTGTCTTT | Chip | 440.5 | 8.8620977 | 0.67106444 | 996 |
| AGAAGGAAAAGCAGACATCT | Chip | 441 | 7.8927207 | 0 | 1897 |
| CCCAGGAGTTAGAGGTTGGGT | Chip | 441 | 14.359755 | 0.23043473 | 3581 |
| TACACTGTTGAACTGTGGTCG | Chip | 442 | 11.909512 | 0.31384075 | 2188 |
| CCTGAGCTTACAATTAAAGAAC | Chip | 443 | 4.1733551 | 0.83727759 | 1822 |
| TTTTAGGATTACATGGATTCA | Chip | 444 | 6.8911624 | 3.2247718E-2 | 3551 |
| TGATTTACAGTAGTGTCTAAC | Chip | 445 | 14.757196 | 0.51577365 | 1281 |
| TCAGAGTCTGTGCATTCTGCTA | Chip | 448 | 4.0254292 | 0 | 4033 |
| CCAGGAGTGCAGGGATGGTATC | Chip | 448 | 11.467561 | 0.80949062 | 770 |
| TAACTAGGATTACAAGCGTGCG | Chip | 448 | 31.862854 | 0.16327241 | 4209 |
| CTCGGAATGGAACAAACAGCGGT | Chip | 449 | 5.3749018 | 0.19437546 | 3759 |
| TGTTTGAGTTCTAGCGCATT | Chip | 449 | 16.729868 | 2.6116509E-2 | 5661 |

| | | | | | |
|-------------------------|------|-------|-----------|------------|------|
| GGGTAAAGAGCCCAATGTATG | Chip | 449.5 | 4.1482205 | 0 | 7206 |
| AGGTGCCCATGAGCTCCATGGC | Chip | 450 | 4.8216996 | 0 | 872 |
| AGCGGCCGCGGAGGGAGGTGCG | Chip | 451 | 9.3864965 | 0 | 4155 |
| CTCATTGCAGCTGCATTACTGT | Chip | 451 | 12.775523 | 0.16016045 | 5272 |
| GCTTGGAAAGTAGGATTGGGAGA | Chip | 451.5 | 11.233044 | 0 | 2381 |
| ATCCTCAGAGAACGAACACAAT | Chip | 453 | 4.7837315 | 0.30605423 | 7663 |
| AGTGTGGAGTTGCGGCATTG | Chip | 453 | 5.2546234 | 0.20798142 | 7527 |
| CCGGCTCGGCGACCAGGCTGAA | Chip | 453 | 8.5154629 | 0 | 7883 |
| TCACGTGAGGGACCTGTGCTG | Chip | 453 | 10.747915 | 0 | 2860 |
| ACCCCAGGAAGTGGAGGTCATG | Chip | 453 | 15.181713 | 0 | 4800 |
| TGCATGGACGTGACTTGGCCAA | Chip | 454 | 9.1805019 | 0 | 4531 |
| TCAGTGCAGGGTGGGAGAGAGA | Chip | 454.5 | 12.989676 | 0 | 6671 |
| GAAGGACCCCTCTGGGTCTCAG | Chip | 456 | 9.4086676 | 0 | 779 |
| TTGGGCTGCAGCAATTATTAGT | Chip | 456 | 12.860962 | 0 | 2444 |
| TTAGGTTGGTGCAAAAGTAATT | Chip | 458 | 6.4138689 | 0.50605494 | 1671 |
| GCACATGAGAACGCTGGCGATGC | Chip | 458 | 6.7410073 | 0.13605854 | 5313 |
| TTGGTCCACTGTGAAATTGGGA | Chip | 458 | 6.8911624 | 0 | 5132 |
| ATGGCTAGCACCGCGTTGCTGG | Chip | 458 | 7.5935292 | 0 | 7053 |
| CATTTACATTTAAGGTTAATAT | Chip | 459 | 15.639179 | 0.90401947 | 7800 |
| TACTGCATTATCAAGGGGAAGG | Chip | 460 | 8.7211084 | 0.21537885 | 2893 |
| CAGGTGTCGGTCAGGCGGTTT | Chip | 461 | 5.7729435 | 0 | 1220 |
| ATTGCCCTTGTCAAGGCACGGT | Chip | 461 | 6.1112909 | 0 | 4326 |
| TCGAACTCATAGTCGTAGCTGT | Chip | 462.5 | 13.292384 | 0.62994796 | 1226 |
| CCTGAGAGCATTCCACACTGAA | Chip | 463 | 4.6639729 | 0.10041243 | 3319 |
| ATCACAGTTTACCATTTGGTA | Chip | 463 | 5.0021725 | 0.31239566 | 7817 |
| TCCAAAGTGTGGGATTATAGG | Chip | 465 | 17.242109 | 1.3300003 | 3018 |
| CCCAGGAGGCGCAGGTTGCGGT | Chip | 465.5 | 9.5150204 | 0.32929623 | 2392 |
| GGGATAAGAGAGTATTATGCA | Chip | 468 | 10.801926 | 0.15427937 | 1103 |
| GGACTTCATGCATTAACAGCATC | Chip | 469 | 11.994136 | 0.18171786 | 6238 |
| GAAAAGGCCTGGGGCAAAGTGT | Chip | 470 | 6.8371511 | 0 | 5619 |
| GGCAAGAACCTCAATTACCTT | Chip | 470 | 9.7505169 | 0 | 4432 |
| CCCGGGAGGAGGAAGTTGCAGT | Chip | 471 | 14.907736 | 0.49508429 | 7614 |
| GACTACAGGCCGGCATCAGAGA | Chip | 472 | 4.256711 | 0 | 5209 |
| TAGGTGCAGGTACAAGGGATG | Chip | 474 | 27.654337 | 0 | 3335 |
| GGAATGCACTAGACTGTGAAAC | Chip | 476.5 | 9.1070547 | 0 | 3930 |
| GTCCCGCATTGGGCATTCTGG | Chip | 478 | 14.542135 | 0 | 4164 |
| AGATTCTACCAGAGCTAGTTG | Chip | 479 | 21.371788 | 0 | 5677 |
| AAGCAGCACAGCAATGACTCTA | Chip | 480 | 4.6990032 | 0.9283309 | 6282 |
| GAGCACTGATTATTGGTCT | Chip | 480 | 10.607106 | 0 | 5025 |
| ATCTGGGAATGGAAGCCTCTG | Chip | 481 | 9.3413534 | 0 | 3105 |
| AGCCACATGGACCTGATGCTAG | Chip | 484 | 4.2733045 | 0.7509253 | 1777 |
| GCAGGTCCTGTTGATTACAGTCA | Chip | 485 | 4.2067757 | 0 | 7345 |
| ACCCGGAGTCGGAGGTTGCACT | Chip | 485.5 | 18.452694 | 0.82682765 | 1663 |
| TCCCGGGCAGGTCGAGCGAGCC | Chip | 486 | 6.8341184 | 0 | 2952 |
| GACATTGAGCGTGTGCGAGTG | Chip | 487 | 8.8567095 | 1.1084136 | 5486 |
| AGTTTGGGTGGAACAGAGTCGT | Chip | 488 | 5.1635141 | 0 | 7451 |
| TATTCTGGGCAACCATTAA | Chip | 488 | 7.3230996 | 0 | 846 |
| TCGTTATAGAACATTCTGGGT | Chip | 488 | 16.445719 | 0 | 6903 |
| CTGAGCACGTAGTTAGGGTCCA | Chip | 489 | 4.1900787 | 0 | 2967 |
| TCAAAGATCAGATGGTTGAGG | Chip | 490 | 5.9690142 | 1.5394258 | 5894 |

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|-------------------------|------|-------|-----------|------------|------|
| GGGAAACTTCACAATGTCCAG | Chip | 490 | 7.6298795 | 1.1095848 | 1081 |
| CCAGGAGGCAGGAAGGTACAGTG | Chip | 490 | 11.773943 | 0.83402246 | 3146 |
| CACGCACGCTGGGTGGAGGCAGC | Chip | 491 | 6.5686502 | 0 | 2274 |
| GGAGGAGGGGTGACTGAATGCT | Chip | 493.5 | 5.2837672 | 1.3940693 | 5273 |
| AGCAGCAGTGTCTGGAATTCT | Chip | 494 | 12.105932 | 0 | 4017 |
| TACGTTAACACGGAGCCAG | Chip | 495 | 6.9299874 | 0.23469403 | 5099 |
| GCCCCGTCGTGGGCCAGGGAT | Chip | 496 | 11.348816 | 0 | 7049 |
| CACTGCCAACCAAGTGGCTGGT | Chip | 497 | 7.1978688 | 0.85389394 | 3845 |
| AACCCAGGAGCCGGAGGTTGTG | Chip | 497.5 | 13.279469 | 0.64875621 | 6547 |
| AAGTCATTGGTAGCTTGATAGG | Chip | 498 | 6.2697625 | 1.5118823 | 5990 |
| AAGCCAAAGTGGCATGCCTCA | Chip | 498 | 11.990122 | 0 | 2355 |
| TAGGGGCAGGATCCTTGAGCC | Chip | 498.5 | 4.7191281 | 0.4260765 | 1644 |
| AGTCCCACACAGCTACAAGGAA | Chip | 499 | 7.60566 | 0 | 6014 |
| TCCGTTTCACACTGCTATAAA | Chip | 499 | 7.7859778 | 0 | 2052 |
| CTAGTTGAAGAGGCTGTCATCA | Chip | 501 | 4.1733551 | 0 | 2603 |
| CAAATGCTATGTGCCAATGCA | Chip | 502 | 4.0724583 | 0 | 6135 |
| CAAAGCCCAGAGGCCTACTTT | Chip | 505 | 5.3973031 | 0 | 7407 |
| TTTGTGACACACAAAACAGT | Chip | 505 | 5.5206022 | 0 | 491 |
| GCTTCTGGTGAGGCCTCAGGAA | Chip | 505 | 7.975009 | 0 | 4527 |
| CAGAGGTAGCATGCTGTGGCTT | Chip | 505 | 10.797435 | 0.23278172 | 7793 |
| GTTGCAGATGTGAACTCGTGC | Chip | 506.5 | 8.8513184 | 0.22174729 | 7281 |
| ACCCGGAGGCAGGGGATGCAGT | Chip | 509.5 | 11.898225 | 1.782097 | 6201 |
| TATGGCATTGTTGGTGATGATA | Chip | 510.5 | 4.2171164 | 1.3768414 | 501 |
| CTGCTGAGGTGGAGATTGCACT | Chip | 512 | 26.993624 | 0 | 2612 |
| ATCCACCCCTGTGGTGGCTTCT | Chip | 514 | 16.400711 | 0 | 7979 |
| GTGGTGTAGGTCACAGTTAGGA | Chip | 515 | 18.389086 | 0 | 1993 |
| GGGCACTCAGCTGTAGAGCAGG | Chip | 521 | 4.0618496 | 0.59147072 | 2046 |
| GGGACGTGAGTGAAGAAGGTCT | Chip | 521 | 4.1307983 | 0.64900005 | 4794 |
| AGCCAGATGAAGAGGTCTTAA | Chip | 523.5 | 4.1061969 | 0 | 3125 |
| GAGAGAAGGGGGATATGAGCCT | Chip | 525.5 | 14.484365 | 1.9670627 | 6129 |
| ACTGGGCCAGGTGTGGTGAGT | Chip | 528 | 13.552105 | 0 | 2970 |
| ACTCCTACATATTAGCATTAAAC | Chip | 528.5 | 9.7604237 | 0 | 1162 |
| GTGTCAGGCCCTGCATTATGTG | Chip | 534 | 11.137771 | 0 | 6980 |
| CGCCGTAAATGCAAGCCTGTAG | Chip | 535 | 4.9944282 | 0 | 6157 |
| TGAGCATTACCTGAGGCCACTG | Chip | 537 | 12.960393 | 1.1288414 | 7777 |
| CACAAACCTCTGCAGCCTGTA | Chip | 539 | 5.4790416 | 0 | 7673 |
| GGCGGGGTGTTTATTAC | Chip | 540 | 4.327754 | 0 | 6522 |
| TTACCACAGTGCCTGTCTAATG | Chip | 540 | 7.5996141 | 0.97252423 | 6233 |
| ATTCCTGTAGGGCTTGCAGA | Chip | 541.5 | 4.4303179 | 1.2648014 | 2272 |
| AAGTTCCGTACATTGCCATGGC | Chip | 543 | 8.2979441 | 1.8236631 | 4232 |
| AGTTGGCAGCCGTTGCT | Chip | 543 | 22.772356 | 0 | 6297 |
| CTGAGCATCATGGCAGAATCTT | Chip | 544 | 4.9654756 | 1.8393198 | 3875 |
| GTCCTACCATGAATTCACTCCA | Chip | 546 | 6.7607136 | 0.36259127 | 580 |
| AAGGAATTGAGGCTGCAGTGA | Chip | 547 | 8.7918367 | 0 | 4864 |
| TCACCGGCAGACGTGGCCTGAT | Chip | 547.5 | 6.7174888 | 0 | 5984 |
| TCCCAGGGCTGGGAGGTGGTC | Chip | 548 | 5.4582028 | 0.1022861 | 3043 |
| TTGATGAGACCATTGCCCGTC | Chip | 548 | 7.5143423 | 0.54138458 | 2828 |
| TCTCAGCTCATGGCAGCCTGA | Chip | 548.5 | 14.15205 | 0 | 6406 |
| GTGCGCCAGCTCAAGGGGAGGC | Chip | 549 | 7.248138 | 0 | 1888 |
| AACCCAGGAGGCAGATGTTGTG | Chip | 549.5 | 15.015123 | 0.7525751 | 5381 |

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|-------------------------|------|-------|-----------|--------------|------|
| GCTGGTGAGCAAAGGAGAAGGA | Chip | 550 | 8.0914707 | 0 | 6964 |
| GATGAGGACCTACAGGTGGCCAG | Chip | 550 | 27.537556 | 0 | 3288 |
| TGTGGTTTTGCCAGTTGAA | Chip | 551 | 8.2979441 | 0 | 7122 |
| CGCTGCGAGGCCCTTGTTC | Chip | 551 | 8.8567095 | 0.32979745 | 1530 |
| GTCACCTTGAACAGGCTACTCA | Chip | 552 | 9.9857645 | 0 | 611 |
| TTTGATAGGGCATAATATA | Chip | 555 | 18.397886 | 0 | 1657 |
| AACAGCTTGCTGCACCTAATA | Chip | 557 | 6.4138689 | 0 | 7021 |
| AGCCTTACATAAACAGCCTTAT | Chip | 558 | 5.5233631 | 0 | 3014 |
| CTGACATGTGGGGATGTC | Chip | 558 | 8.8405285 | 1.9700389 | 451 |
| AGACGCGGTGGTGCATGCCTGT | Chip | 559 | 12.046187 | 0 | 2164 |
| TCTTGCCTCGCAGGCGCAGTTC | Chip | 582 | 4.7118134 | 0 | 4374 |
| GGAGAGGGGAACTTGTTGCTTG | Chip | 583 | 4.8775826 | 1.4784276 | 1701 |
| AGGAGGGAGCTTAAGCCAGGCA | Chip | 583.5 | 9.4029713 | 0 | 2449 |
| TGAGCCAAGTTCACACCATTGC | Chip | 585 | 5.2922459 | 1.0937314 | 2310 |
| CTTCTGGCCGTGATGCGC | Chip | 587 | 4.1420093 | 0 | 6592 |
| GAATGCAGTGGCACCATCTCAG | Chip | 590 | 8.9414644 | 0 | 7727 |
| GAGGCCGGCGCAGGCGGACTT | Chip | 595 | 7.0306478 | 0 | 3528 |
| AGTGCCAAATCGAGGGCTCTGA | Chip | 595 | 12.298795 | 0 | 4693 |
| GGGGCCTGCACCGGTCTGCGCGG | Chip | 596.5 | 5.8669548 | 0 | 3831 |
| ATGCGGAGCCCCAACGCTTGAAG | Chip | 596.5 | 5.9970665 | 0 | 1309 |
| TCTAATTTGGCATTTAACCT | Chip | 597 | 16.172768 | 0 | 535 |
| ATTGGCCATTGATGTATTAT | Chip | 599 | 5.7133183 | 0 | 6604 |
| TGGTCACTGTGGATAGTG | Chip | 599 | 7.1978688 | 0.10208545 | 1066 |
| GGAGGTGACTGGATCATGGCA | Chip | 600 | 4.7118134 | 0 | 2510 |
| TGTGCTGGAGATCAGCTTATT | Chip | 601 | 5.2590327 | 2.1514578 | 1568 |
| GAGATACTTAAGATGGGGCTCC | Chip | 603 | 5.4047599 | 0 | 7660 |
| ATGTGAGCTGGGCCGGCCAG | Chip | 603 | 5.9279523 | 0 | 2673 |
| GAGGTAGGTGAGGAGGCCTGC | Chip | 605.5 | 15.989591 | 0 | 4320 |
| TGAGCTGCTTCTATAATGTGT | Chip | 606 | 4.6176581 | 0 | 3966 |
| ATGCCCAATGTCACAATTTG | Chip | 608 | 5.1635141 | 0 | 545 |
| AGGAGCCGGGCCTGGCCCTGC | Chip | 609 | 8.5671558 | 0.8987155 | 4177 |
| AATGCCTGGAGAGCCTAGAGG | Chip | 610.5 | 5.5086098 | 0 | 1836 |
| AGCCTAGGGTTCTGATGTCACT | Chip | 570 | 5.0253716 | 0 | 6248 |
| TCAGCTTCGCCTGAGGTATGGG | Chip | 574.5 | 9.0224905 | 0 | 7153 |
| GGCTGGCAGGTCTGCACAGGG | Chip | 575 | 6.1669488 | 0 | 7602 |
| GAGCCAAGATTGTGTCCTGCA | Chip | 576 | 8.4221792 | 0 | 5971 |
| TAGAAGAAAGTGAAGCTGGGA | Chip | 576 | 11.429537 | 0 | 3072 |
| TAAACATAACCTGTATGGCT | Chip | 577 | 7.60566 | 0 | 5651 |
| CACTCTGCGCTGGCGCCAGCG | Chip | 580 | 8.6578741 | 0 | 6781 |
| GATCGGGGGCGCCCCAAG | Chip | 581 | 7.5813851 | 0 | 4979 |
| GAAAGAGAACCTGGGCCTAGAT | Chip | 617 | 34.624321 | 0 | 1015 |
| GCTCTGTGTTACAAGTTGGG | Chip | 617.5 | 4.9355788 | 6.8681851E-2 | 4295 |
| TGGGGTACACGTGGGGCAGGAT | Chip | 618.5 | 4.2317729 | 1.5335078 | 5445 |
| TCTCTTGAGCTCAGTTCTGATG | Chip | 618.5 | 4.7513571 | 0 | 5480 |
| TGGAATCATTGCTGTGTTGCTT | Chip | 620 | 4.6990032 | 2.0980077 | 5171 |
| TGGCTCCACAGGCCAGGGTGT | Chip | 622.5 | 4.2067757 | 0 | 547 |
| GGAGAGTGGATTCCAGCTGTAT | Chip | 625 | 6.4392424 | 0 | 7623 |
| GTGGTGGATGTCTGTAATCTCA | Chip | 625.5 | 12.886829 | 0 | 4036 |
| AGATGTTATAACTCATGAGTG | Chip | 626 | 5.7181096 | 0.77803987 | 6432 |
| TCAGCCTGGCAGGATGGCCTGG | Chip | 639.5 | 6.2911248 | 0 | 5833 |

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|------------------------|------|-------|-----------|--------------|------|
| AGCCCCTTGTGGCGCACAGCA | Chip | 643 | 4.2898717 | 0 | 5569 |
| CCGGGAGGTGGAGATTGCGGTG | Chip | 644.5 | 6.6419034 | 0 | 2852 |
| GCTGAGGTGGAGGAAGGAGACC | Chip | 644.5 | 20.633234 | 0 | 6512 |
| CACCGAGTGACAGTAGCCATCA | Chip | 645.5 | 8.2751999 | 0 | 629 |
| ATGTATACGTGCAGGTACAGG | Chip | 648 | 7.0392289 | 0 | 5338 |
| TCATTGTGCTGAGCAAGGT | Chip | 648.5 | 18.055964 | 1.5568053 | 6349 |
| CCAGGCAGCCTGCTCCATTCTG | Chip | 649 | 5.3638248 | 0 | 6520 |
| GTCACCCGTTGACTATCCACC | Chip | 651 | 4.019371 | 0 | 1095 |
| TCCGGGGGTGGTAGATTCCTT | Chip | 652 | 14.181099 | 0 | 7895 |
| GTGTCCTTCCGGGCCTGGAGG | Chip | 654 | 6.6171184 | 0 | 1173 |
| TTCCTGCAGGCCATAGAGCCTG | Chip | 657 | 5.9990945 | 0 | 7292 |
| ATCCCTGTGACGAGCATCCCTA | Chip | 660 | 5.1823177 | 0 | 1003 |
| CTGTGGTACAGCTGGACGGA | Chip | 664 | 4.6319594 | 3.5137784 | 2399 |
| CCCACAGGTGTGAGCTTGTGG | Chip | 665.5 | 8.2409916 | 0 | 2347 |
| TGTGGCCATTCTTGAGGTCGAC | Chip | 668 | 5.7854853 | 0 | 5822 |
| GGAGTGCAATGGCGCCATCTGG | Chip | 668 | 7.5813851 | 0 | 5892 |
| AAGAGGTAGCAGTCACAAAAGA | Chip | 682 | 4.1900787 | 3.1956244 | 1962 |
| AAGAACGATTCTTCATTGGTT | Chip | 682.5 | 29.800766 | 0.11257268 | 459 |
| GGGCAACAGAGCGAGGGCCTGT | Chip | 684 | 13.675286 | 1.2772781 | 5909 |
| GCTTCTCGGGCCTGATGTCGTC | Chip | 685.5 | 5.4660602 | 0 | 4795 |
| AGCTCCTGAAAATCCAGACTGG | Chip | 690 | 4.3064132 | 0 | 1369 |
| GGCAATCATTGGCATTCTCTGG | Chip | 691.5 | 9.1205435 | 0.58638209 | 4922 |
| TGTCTGGATAGAGCCTAGGCC | Chip | 692.5 | 13.849563 | 0 | 4574 |
| CTAGATAACTTATTTCAAGGA | Chip | 693.5 | 8.8026762 | 1.9033302 | 2380 |
| TTGAGGCAGGTCCGGGTCTTC | Chip | 695 | 9.4086676 | 0 | 4316 |
| CTGAGATGGAGTTCGCTCTTC | Chip | 696 | 5.5946345 | 0 | 6303 |
| AAACACTGCTGCTGGTTCTGTG | Chip | 698 | 8.1738958 | 0 | 7661 |
| TCCTCATTCTGGTGCATCAA | Chip | 700 | 17.810143 | 0 | 6581 |
| AATGCTGCTTCTTTGCAT | Chip | 701.5 | 6.8995986 | 1.0125313 | 1498 |
| TGCCTCAGCTGAGGCCGCTCCA | Chip | 702 | 5.5968246 | 0 | 3211 |
| GACTTCTGAATTCTATCAGGT | Chip | 707 | 5.1406145 | 0 | 1742 |
| GTAATAGTCTCAAACCTCTGG | Chip | 708 | 17.242109 | 0 | 3577 |
| GGGGTGGATTCAGGCGGTGTC | Chip | 710 | 8.483757 | 0 | 2743 |
| AAAATATGTATAACTCTTCTGC | Chip | 712 | 6.7738304 | 0 | 4196 |
| GCACATGAGGCTGTCTTGCT | Chip | 714 | 6.0531082 | 0 | 3981 |
| CAGGGTGACAAGTGGCAAGGAG | Chip | 714.5 | 6.6849232 | 0 | 630 |
| TGTGACTAGGCCTGAGCTTTG | Chip | 715 | 5.0013514 | 0 | 2104 |
| TCAGGTCCAAGATGCCATCCA | Chip | 715 | 8.1952085 | 0 | 5324 |
| GGTATATGGGCCTCACTTG | Chip | 716 | 4.1230264 | 3.7952623 | 2063 |
| AATGCTGCTTCTTTGCA | Chip | 716 | 6.9580421 | 0.19260259 | 2647 |
| AGGGGAGGTGTCCCCAAATCTC | Chip | 717 | 9.0071344 | 0 | 2351 |
| TCTCCATGGATTTGGAAATGAT | Chip | 718 | 4.5434222 | 2.3216989 | 4119 |
| GCTCCAGTGACCATCGTTTAG | Chip | 719 | 4.2234468 | 3.1870663 | 6658 |
| CATGGTGATTGCGCCTTCTAT | Chip | 719 | 5.123785 | 0 | 2327 |
| TAATTCAGTGCAAGCTCACGG | Chip | 719 | 13.696744 | 0 | 6456 |
| GTGGGGCAGGCAGTGCTAGGA | Chip | 723 | 7.3230996 | 6.7598522E-2 | 5993 |
| TGGTATGCTTATTATCTTCAAC | Chip | 728 | 8.4669981 | 0 | 7732 |
| CTCTAGCTCCCAGGGAGCGTCT | Chip | 668.5 | 6.4003 | 0 | 5415 |
| ATGGCCTGCAGTGCTGCCACAG | Chip | 670 | 14.67015 | 0 | 937 |
| CTGCAGTATGAGCTACCCAGGT | Chip | 671 | 4.2650108 | 3.2315347 | 8052 |

| | | | | | |
|-------------------------|------|-------|-----------|--------------|------|
| ATTCTGGACAAGGCAAGCTCCT | Chip | 671.5 | 6.9580421 | 3.3300094E-2 | 1743 |
| TGGAGGCAGCCGTGAACCACCT | Chip | 672 | 4.9556217 | 0 | 7688 |
| GGGAAACAGCCCAGGCTCAGGG | Chip | 672 | 7.691021 | 0 | 4034 |
| ATATGTGGCATTATTCTGAGG | Chip | 672 | 15.917648 | 0 | 2655 |
| TTTAGGTTTTTCACGTGGCTA | Chip | 673 | 4.8540587 | 0 | 6257 |
| ATGCTTCTTGTGCTGCT | Chip | 673 | 9.3619328 | 1.8766843 | 1392 |
| AGGGGCACGAGTAGAGCTCTAG | Chip | 674 | 7.1852641 | 0 | 2471 |
| GTGATTTCATGCCCTGCTAGG | Chip | 674.5 | 7.3355422 | 0 | 6969 |
| CGTCTAGGCCGTGCCCTGAGGT | Chip | 675 | 4.1926575 | 0 | 6959 |
| GCCCAGAGTTGAAGATAACAGT | Chip | 678 | 17.515587 | 0 | 4159 |
| CGTGGGGCGGGTGGACACTTGC | Chip | 681 | 4.7197661 | 0 | 4471 |
| GGTAGCCAATTAAACATTCC | Chip | 681 | 12.129737 | 0 | 1585 |
| CTCGATTGAGTAGGCCAGCACT | Chip | 633 | 30.601658 | 0.83583182 | 5192 |
| CCGTGTGCACGCCCGGTGCTG | Chip | 636 | 4.8875899 | 0 | 4792 |
| TTGGGGTCCCACAGGCTGCCCTG | Chip | 636 | 5.9998269 | 0 | 7998 |
| ACACATGGTCTACTTCTCTCA | Chip | 636.5 | 8.1722431 | 0 | 7052 |
| TCTCTGGACTCGAGCTTACTCA | Chip | 729.5 | 5.9595518 | 0 | 819 |
| CCCCACTACCGTGATGTGCGAGG | Chip | 738 | 7.4284 | 0 | 4604 |
| GGTGCCCAAGGAAGGTTGCCGT | Chip | 739 | 7.9867125 | 0 | 6872 |
| GTGCTAATGAATTGGAGTGCCT | Chip | 743 | 5.2697325 | 1.8966018 | 5534 |
| TGGAGCCAGCGGCCTGCTGAGG | Chip | 744 | 4.4214902 | 3.8499751 | 3540 |
| TTGCTACCATTGATACCAGCAC | Chip | 748 | 5.1863647 | 4.3822565 | 1461 |
| TCACTTGAACCTGGGAGGCAGA | Chip | 750 | 12.380392 | 0 | 4966 |
| GGGTCGGGCAGGCCCTCGTC | Chip | 752 | 8.9014053 | 0 | 1934 |
| GGGCTCGAACGCCTGGTGGTTG | Chip | 753 | 5.1253204 | 0 | 4848 |
| GTCAGCGTGCTCAGCCTATTAT | Chip | 756 | 4.9074416 | 0 | 5183 |
| TCTAAATTACTTGGGCAGTAT | Chip | 761.5 | 6.2697625 | 1.6999904 | 2670 |
| GGCCTCTGCCCGCGGGCTCG | Chip | 762 | 7.9339442 | 0 | 2699 |
| TGCCATGGCCTAGACCTGTGAT | Chip | 762 | 18.256193 | 0 | 7177 |
| GTCTCCTTGTGGATCTCAAGGA | Chip | 763 | 4.5378304 | 0 | 4260 |
| TCACATTTCAAAAGCTGGTGC | Chip | 764.5 | 10.310376 | 0 | 1471 |
| TGCTAATAAACTCCAGGCTGAG | Chip | 765 | 9.6709318 | 0 | 5051 |
| GGGGTCGGGGCATGCCACTTA | Chip | 766 | 5.4790416 | 0 | 2832 |
| TAGCTACCATTATTGAGCACCT | Chip | 757 | 4.2067757 | 2.5492058 | 5614 |
| CTGTGGCCAGAGCGCCGTTGAC | Chip | 758 | 4.4069309 | 3.8043509 | 5939 |
| TTGGCGCCCAAGGACGCCGCCG | Chip | 758 | 5.6465821 | 0 | 3563 |
| ACCACTGCCCATGGTAAAAC | Chip | 770 | 5.6754804 | 0 | 4415 |
| CCAGCTGCTCCTCTGCAATGG | Chip | 771 | 5.1329703 | 0 | 1146 |
| CCCAGAGCATGTGCTGCCCTTG | Chip | 772 | 5.8999434 | 0 | 4850 |
| AAATGCCTCATTTCTCTACT | Chip | 773.5 | 5.2546234 | 0 | 6758 |
| AAGAAGAGAACTGGCATCCTAA | Chip | 776 | 16.804207 | 0 | 1366 |
| AGGAATGTGAAACAGGTGGCTG | Chip | 779 | 11.010866 | 0 | 1520 |
| GTGCTGGGGAGATAGGAAGAGA | Chip | 779 | 22.632921 | 0 | 7145 |
| GGTGCCAGATGAGGCCCGCGAT | Chip | 782 | 4.0893412 | 2.3830264 | 1793 |
| TGTGGGGATCTCTAGCTTTC | Chip | 782.5 | 4.3133802 | 0 | 3141 |
| AGGGCTGCCAGTGTGAGAGCT | Chip | 783 | 10.117671 | 0 | 6700 |
| GAACCTGCAGCTGTGATTGTG | Chip | 783 | 13.552105 | 0 | 7512 |
| GAACCTAGCATGTCCTTAGG | Chip | 783.5 | 5.8142152 | 4.4672356 | 6126 |
| CAAGTAGAACAGAGCTACCTTG | Chip | 784 | 4.3229294 | 0.8555572 | 1075 |
| TCGGGCTCGCTCCCTAGCGGA | Chip | 784 | 10.629307 | 0 | 1614 |

| | | | | | |
|-------------------------|------|-------|-----------|--------------|------|
| AAGCCAGGTTCCATGGAGGAGC | Chip | 787 | 4.8854122 | 7.1262881E-2 | 2692 |
| GCAGGGCCACCTGGAGAGCGCT | Chip | 787.5 | 6.7146759 | 0 | 6873 |
| AGCTCTGCTCGGGCATGCCCTGC | Chip | 788 | 12.030199 | 0 | 6294 |
| TGCATGGTGTAAATTCTAATGCT | Chip | 788.5 | 9.2577066 | 0.38619444 | 1525 |
| GTCCAGGCCTGCCCTGAGGAG | Chip | 789 | 4.3558846 | 2.512171 | 4749 |
| GCACCCGTCAAAATGGACCAA | Chip | 794 | 6.4544711 | 0 | 7097 |
| ATGGCCTCAGCATGGAGCTTCG | Chip | 794.5 | 5.0869894 | 2.2018771 | 6103 |
| ATGCAACTACCCCCCAGGATTT | Chip | 799.5 | 6.5352135 | 0 | 1780 |
| TTGAGACTGAGTCTGCCCTGT | Chip | 800 | 5.8500195 | 0 | 1292 |
| AGCCCAGCTTCCCCGGTTGCTA | Chip | 806 | 4.927527 | 0 | 6912 |
| AATCCAGGTGGCGGAGGTTGTG | Chip | 806 | 24.423626 | 0 | 1545 |
| TGTGCTCAGTCTTGGCTGGGA | Chip | 809 | 11.820129 | 0 | 7626 |
| AAGGCTCCAGTGAATGCTGGCA | Chip | 816.5 | 9.4591436 | 0 | 7508 |
| CCTGTATGGCTATTCCCTGGAC | Chip | 822 | 6.8911624 | 0.90677857 | 5015 |
| ATTGGCCAGACTTATCCTTCAG | Chip | 823 | 11.734104 | 0 | 4651 |
| GCTAGTGTGCCCCAGCGTAGCC | Chip | 825 | 4.6319594 | 4.9597144 | 6749 |
| TGCCTAGGCTGGAATGCAGTGG | Chip | 827 | 4.6159163 | 1.3404014 | 3756 |
| AACTTGCCAAGAGCTTGCTAG | Chip | 828 | 5.1558862 | 1.5425116 | 2386 |
| AGCCTCTTGTGGATGGTCAGCGA | Chip | 832 | 20.01862 | 0 | 2359 |
| CTTGAATGTCCTGTGGCAAAGT | Chip | 834 | 4.5484204 | 0 | 2316 |
| ACAGCAGAGCCTGGTACTTACT | Chip | 834 | 5.6041431 | 0.60750878 | 5561 |
| ATGGGTGCAGCATGGTGGGAAC | Chip | 835 | 4.6319594 | 3.9546115 | 5542 |
| GCCTGGCGCCGGGCTGCCGTGTC | Chip | 835 | 11.484417 | 0 | 1333 |
| CAGGAGCTCAAGACCACCCCTGG | Chip | 835 | 22.221758 | 0 | 3287 |
| TGGCCCTTGTCAAATATGTCA | Chip | 837 | 5.359941 | 0 | 3462 |
| TCTGTAGCTTCTTGAGAGGCCA | Chip | 837 | 5.8042397 | 0 | 3218 |
| ACCCCTGGAGGTGGAGGTGCAGT | Chip | 837 | 15.820662 | 0.62484062 | 6967 |
| CACTCCAGTCTGGGAACAAAGC | Chip | 838 | 10.3373 | 1.8536514 | 5397 |
| TGGCCTCTGAGATGCCACGG | Chip | 839 | 5.7350197 | 0 | 7683 |
| ACGGGCCTCTTCAGGCGAG | Chip | 839.5 | 9.0489893 | 0 | 6989 |
| GGAGGTCCCAGGCCTGGCAGCA | Chip | 840 | 4.0342441 | 0 | 3005 |
| CTTTTCACTGTGTCCACAC | Chip | 846 | 4.9113712 | 0 | 1828 |
| CAGCAGGAGGTGAGTAGCAGGT | Chip | 803 | 4.2898717 | 3.117506 | 6313 |
| TCAAAATGCCGAGTGCCAGGT | Chip | 804 | 5.4790416 | 0 | 3690 |
| ACCCCAGAGGCAGGCTGCAG | Chip | 804.5 | 10.3373 | 1.7294502 | 3879 |
| AGTGCAGGCCAGGCCAGGCC | Chip | 858 | 15.229292 | 0 | 8013 |
| TGCTGTGAGGTTGAGAAGGAAG | Chip | 863 | 9.9128065 | 0 | 8131 |
| ACGGGCTGGGACGGGGAAAGCTC | Chip | 866 | 6.1524086 | 1.177045 | 942 |
| GTGACATGGTTGCCGTCCCTG | Chip | 867 | 5.6837163 | 0 | 6486 |
| TCTGCTCAGCCGATCTGCTCCG | Chip | 867 | 5.98734 | 0 | 4273 |
| CCTGCGGGCTGTGCTGAAGCCT | Chip | 878 | 7.2651324 | 0 | 5020 |
| GCAGTGGCATGATGTGGGCTCA | Chip | 879 | 4.743588 | 0 | 6136 |
| TCCCTAGTCGCATCTGTGGAGA | Chip | 879.5 | 5.6843143 | 4.3106165 | 6425 |
| CTGTACTTTGCAGGTCACAGC | Chip | 880 | 6.3458524 | 0 | 3919 |
| CCTGTGATATTGTTATAATAT | Chip | 882 | 6.3526735 | 0 | 6827 |
| TTAGTGCTTGGCACACAATACA | Chip | 883 | 6.5083675 | 0 | 4704 |
| CCAGTGTGCATTATCATGTGTC | Chip | 883.5 | 4.0270753 | 0 | 8143 |
| CATAATTCTACCAGGGCCATA | Chip | 886 | 5.9354606 | 1.0480881 | 3260 |
| CTTAGAGATGGGTTTACTTAG | Chip | 886 | 7.7022095 | 1.8901725 | 551 |
| GTGCTGACAGGAGCCTGGCGGT | Chip | 887 | 4.5548515 | 0 | 3849 |

| | | | | | |
|--------------------------|------|-------|-----------|------------|------|
| TGCCTGTGGAAAGGCTGGTGCT | Chip | 890 | 5.8571658 | 2.275178 | 7828 |
| AGGCGCATTGAGGCCCTGTTGC | Chip | 891 | 6.5352135 | 0 | 4378 |
| AGGGACTATTTACCCATCTCAC | Chip | 892 | 4.1817203 | 1.2194986 | 5227 |
| ATTACCGCTGAGTCCTATGGAG | Chip | 896 | 4.5434222 | 5.959722 | 3601 |
| CCAGACTCATCTGCCATTGCTG | Chip | 897 | 23.311127 | 0.8450678 | 2416 |
| TCTCTGGTTATGTCATTAAGCA | Chip | 898 | 6.6948843 | 0 | 449 |
| GGCGGTCA CGTG GGGAGAGGCT | Chip | 899.5 | 5.8892388 | 0.20070651 | 2679 |
| CTGCTGAGCCGCACCCAGGAGC | Chip | 900 | 4.6381359 | 0 | 2391 |
| CCTGGTGCAGGTGTGTTGCCAG | Chip | 900 | 6.323246 | 0 | 6609 |
| CTGTAATCCCAGCTACCTGGGA | Chip | 902 | 4.8697472 | 5.3667827 | 8092 |
| TACAGTGCTTGGTATCTAGTAA | Chip | 902 | 5.1863647 | 2.0677381 | 6371 |
| GATGGCCTCATGGCTGCAGGCC | Chip | 902 | 5.1939707 | 1.0811797 | 5352 |
| AGCTTTAGCTCCTGGTTGCAA | Chip | 903 | 4.5837574 | 5.3579297 | 7894 |
| CCAGCTTATAGCTCAAAGGA | Chip | 906 | 6.097331 | 1.0239685 | 838 |
| CATTGCACTCTAGCCT | Chip | 875 | 5.6377931 | 2.2476213 | 5600 |
| ACTGGCCAGCCAACAACAATAG | Chip | 877 | 11.868977 | 0 | 995 |
| TTGCTGGAAGGTGGCTGGAATC | Chip | 877.5 | 4.3229294 | 0.55562276 | 4772 |
| CTCTCTGGGCCAGTTGGCACC | Chip | 913 | 5.2497282 | 0 | 445 |
| AATAAACAAAGGACAAGGAGGT | Chip | 913 | 8.9799547 | 0 | 1800 |
| TGGGCCCGCAGCTGCTGCTCCA | Chip | 914.5 | 5.5086098 | 0 | 3907 |
| CTAGGGTGTGAGATTTGCCT | Chip | 921 | 4.2067757 | 0 | 6970 |
| CAGGCGGGCAGGTGCGGCCCCCT | Chip | 921 | 5.0942249 | 0.94588989 | 1129 |
| TCCTGTCAAGTGCTTGTCCCTGC | Chip | 921 | 14.462107 | 0 | 6786 |
| CCCTGCTGTAGCGGAGGAAC | Chip | 951 | 5.2697325 | 0 | 3684 |
| TGTAGCTCTCCAGCCAGCAAGG | Chip | 954 | 20.069492 | 0 | 7896 |
| CCTGTCTCTGCAGGGCCCTGCC | Chip | 957 | 4.5704069 | 0 | 2495 |
| CCCTCTCGCGGGGAGCGGGAGG | Chip | 957.5 | 4.7794881 | 0 | 3844 |
| GCAGGCTGTCTAAAGTTAGAGT | Chip | 960 | 5.3449593 | 4.6880941 | 5184 |
| TTCTCCTAGGCTGAGGCGGGA | Chip | 961 | 6.1913404 | 0 | 7826 |
| TTCTCAAAGTGTGCTCCCTGGA | Chip | 961.5 | 4.2129807 | 0 | 2474 |
| GGTGTGTCTGCCAGGAAGTGCA | Chip | 963 | 11.534825 | 0.66818869 | 4366 |
| TAGCAGAAGTTGCAAAGTAGGG | Chip | 964.5 | 4.9478436 | 0.67141521 | 931 |
| AGGTGGCAGATGGGGTGCTCG | Chip | 967 | 4.0170503 | 0.22677642 | 6101 |
| GTCACTCAGGCTGGAGTTCACT | Chip | 967 | 4.7555313 | 2.6958821 | 4261 |
| CAGGAAAGGGATGGCTGCCAC | Chip | 967.5 | 5.9425497 | 0 | 7781 |
| TGCTCCATCTAGAGCTCTGCAG | Chip | 969.5 | 20.895596 | 0 | 998 |
| TATTGGTGAATCTATGGTCAG | Chip | 970 | 4.502933 | 1.3941963 | 3363 |
| GGGATTACAGATGTGAGCCATT | Chip | 565 | 16.233715 | 0.93799287 | 3649 |
| TCAGGGATTAAGGTCAAAGGTG | Chip | 566 | 8.9372482 | 0.86125702 | 3077 |
| CTGGCCCAGGTGGCTGAGG | Chip | 928 | 7.3095355 | 0 | 7397 |
| TGGCTCCGTTGTACAGGCTGGA | Chip | 930.5 | 7.3230996 | 0 | 2494 |
| TTTGGCCACATCCTTTGAGT | Chip | 932 | 4.3311777 | 5.6849165 | 511 |
| TCTGGACAGGGCGCTTGGGG | Chip | 933 | 4.8068542 | 0 | 6648 |
| CCAGGTAGGAGAGTCACATGT | Chip | 933 | 4.8226123 | 0.57364786 | 1224 |
| AGGAGCGGATGTGCTGCCAG | Chip | 939.5 | 5.0623851 | 1.831581 | 8099 |
| GCTCGGTGGCCAGCCTGAGGCC | Chip | 942 | 4.2540503 | 0 | 1802 |
| AGCGGCCGCGAGCTGGCCAGG | Chip | 978 | 16.791355 | 0 | 2337 |
| AGATGGAGTCTCACTTTGTTG | Chip | 982 | 4.1246719 | 0 | 877 |
| AACGCCAGCCTGATCAAATG | Chip | 983 | 5.3299565 | 0.62059402 | 709 |
| GGGACAATGGGAGGCCTCTCTCC | Chip | 983.5 | 5.7422438 | 0 | 2535 |

| | | | | | |
|------------------------|------|--------|-----------|--------------|------|
| TGTCCCGGGTTGCGTTGGG | Chip | 985 | 5.1314249 | 0 | 552 |
| AGATTCTGAGTAGCTGTGCTT | Chip | 987 | 4.8932362 | 2.5229793 | 5850 |
| AGTCCCGCGCTCCATGGGAGTC | Chip | 987 | 9.5048828 | 0 | 6635 |
| TGAACATGCTGTTGATGGCCTG | Chip | 991.5 | 4.3887382 | 0 | 6462 |
| TCTGAGACTGGGTTAGAATGT | Chip | 993 | 4.4760852 | 5.1122303 | 1948 |
| TATAGCAGCATGATTATAGTC | Chip | 993.5 | 6.7212648 | 0 | 5013 |
| ATGGGTCAGTTCAGTGGCCAAC | Chip | 999.5 | 5.8428679 | 0 | 2842 |
| TAGAGGATGATCCTTCCTTGCC | Chip | 1000.5 | 9.1205435 | 1.0477313 | 3234 |
| CCTCCTGCACCTCCAGGAAC | Chip | 1002 | 10.534293 | 0 | 761 |
| TGTGCCAACGTGCAGGTTGT | Chip | 1005 | 4.2650108 | 0 | 1169 |
| TGCTGATGGTCATTAGT | Chip | 943 | 4.6639729 | 1.4060062 | 7992 |
| TCCAGATGCTGCACATTCTGA | Chip | 1010 | 4.838347 | 0 | 2021 |
| AATATTCTTCTAAAGCCCTT | Chip | 1018.5 | 4.8226123 | 2.7607162 | 852 |
| TAGGCCCTAGTGCACGTGGC | Chip | 1019 | 6.2979813 | 0 | 3650 |
| TGCTGGGATTACAGTCATGAGC | Chip | 1020 | 4.8540587 | 0 | 3800 |
| AGTGCCTTACAACCTCTGA | Chip | 1021 | 6.4679708 | 0 | 7884 |
| CTCAGTGAATTGGAGGATGGCC | Chip | 1023 | 7.8454118 | 0 | 3518 |
| TTCACAGTGGTAGTGCATTAG | Chip | 1025 | 5.033093 | 6.1715879 | 1385 |
| AGCCCCGATCTCGCTAAAGATA | Chip | 1037 | 4.4051266 | 0 | 2989 |
| CCTCTAGCAAATCAACATAAA | Chip | 1037 | 18.803524 | 0 | 2073 |
| CATTGCAACTTCAAACCTCTGG | Chip | 1037.5 | 19.847919 | 1.7158511 | 4074 |
| AGCCTCAGGTTGGTTGGTTCTT | Chip | 1042.5 | 4.1900787 | 4.8052392 | 1089 |
| AGTCGGAAGCTGTGCGTAAATC | Chip | 1043 | 4.256711 | 6.0202398 | 5709 |
| GATGCGGGCCCGCTCCACTGCC | Chip | 1043 | 4.4866943 | 1.3823857 | 2800 |
| CTTCTGGCGTTGGAGGTCTGAG | Chip | 1043.5 | 4.5190501 | 0 | 3284 |
| TTGGGATTACAGGTGTAAGCCA | Chip | 1046 | 14.053276 | 0.31409904 | 1022 |
| GTGGTTGTTCCAGGTTGAAA | Chip | 1047 | 5.1352386 | 0 | 4697 |
| TTCTGGGCACACAGGCCCTGGT | Chip | 1050 | 6.4271297 | 0 | 5895 |
| TCCGCCCGCACGTATGGAGTGG | Chip | 1051 | 8.5338745 | 0 | 5473 |
| CAGCCTGCATCATCTGCAGC | Chip | 1052.5 | 20.971851 | 0 | 7025 |
| TTCCGGACGCCGTCTCCAGC | Chip | 1053 | 15.188011 | 0 | 934 |
| CAGCAGAGAAATTACATATTG | Chip | 1053.5 | 5.0869894 | 0.55714673 | 1794 |
| CCAAAGTGCTAGGATTACAGGT | Chip | 1054 | 4.3064132 | 4.0962029 | 4553 |
| TCAGCCAGCCAGCTACAGGCTT | Chip | 1054 | 5.2848206 | 1.757583 | 5726 |
| GAGAGTTAGTTGAGCAGTCTGA | Chip | 1057 | 4.0555487 | 0 | 1781 |
| CCTGAGGATGCCAGCATGGGTG | Chip | 1057 | 4.3358822 | 0 | 1796 |
| TTCCATATCTGTTGCATATCAT | Chip | 1059 | 4.0724583 | 4.4120793 | 381 |
| GGATGTTGATTGAATGGCCATT | Chip | 1059 | 6.981535 | 0 | 2176 |
| GGCTCAAGTGATCCTCCT | Chip | 1059 | 8.6334085 | 0 | 3107 |
| GCCCTTACAGGGTGGTCAGCCA | Chip | 1060 | 9.4540491 | 3.7158478E-2 | 2886 |
| ACCATGTTGGCCAAGCTGGTCT | Chip | 1061 | 10.752426 | 0 | 2147 |
| AGAGGAAGTAATCAGGACCTGC | Chip | 1063 | 5.6988263 | 0 | 7182 |
| CAATCAATGCTGCTAGTCCTT | Chip | 1064 | 5.9849868 | 2.8310661 | 1965 |
| CCTCCCCACAGCCCAGGAGACT | Chip | 1065 | 4.541996 | 0 | 6539 |
| AGTCCGGGGTCTGGACACCTGG | Chip | 1066 | 4.1382761 | 0 | 4551 |
| ATGATGGCTAGGCTGGTTTGA | Chip | 1068 | 4.3558846 | 3.1461418 | 3317 |
| CCCCGTGTTAGCATATCAT | Chip | 1069.5 | 4.0893412 | 0.18084149 | 6003 |
| AGTGTGTCACACGGCTCAGCA | Chip | 1070.5 | 10.399335 | 0 | 2564 |
| TCACATCCTCTCCAACATG | Chip | 1072 | 4.818759 | 1.6717633 | 5131 |
| GTAAAAAGGCCAACGCCCTGTG | Chip | 1074 | 11.836436 | 0 | 1483 |

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|-------------------------|------|--------|-----------|--------------|------|
| CCCAGGGGTTCAAGGCTGCAGT | Chip | 1033 | 4.0216489 | 6.0328941 | 7918 |
| CTTGTCTGCTATAAAATCCAG | Chip | 1036 | 4.1930809 | 0 | 8113 |
| CATCTGGATGATTCTCCTG | Chip | 1083.5 | 7.096612 | 0 | 8075 |
| CTAGGTGATCCACTGCTCTTT | Chip | 1086 | 4.8540587 | 0 | 5027 |
| CCTGCTAACGAATATGGCGAT | Chip | 1090.5 | 16.072001 | 0 | 5784 |
| GAGACGTGGCCTTGCCTGAGC | Chip | 1092 | 6.8065529 | 0 | 7338 |
| AGGCTATTCCACTCTTCTCAT | Chip | 1092 | 11.572475 | 0 | 1673 |
| CAGAGCTGTCCAAACCCGTGACA | Chip | 1104.5 | 4.6639729 | 0.53870815 | 2095 |
| CATGGGGCCCAGTGTGCTCCAAG | Chip | 1105 | 4.2067757 | 1.293996 | 891 |
| TGGCCGCCACCTCCAGGGTTG | Chip | 1107 | 5.9425497 | 0 | 7374 |
| GTTGGCTATGAGAGCTTAGTG | Chip | 1110 | 8.4109449 | 0 | 1558 |
| TCTCATTCTTCAGTGGCTTTGT | Chip | 1115 | 4.7267513 | 0 | 7437 |
| CAGAGCTGTCCAAACCCGTGAC | Chip | 1115.5 | 4.5837574 | 0 | 1708 |
| CGGCCAACGCCGGGGCCCCGAAG | Chip | 1115.5 | 5.9242396 | 0 | 7404 |
| GCCTATGTCTCAAATCAT | Chip | 1116 | 6.1808176 | 0 | 3720 |
| TTTCCCAGGCTGGAATGCAGTG | Chip | 1117 | 4.3676271 | 5.109436 | 559 |
| GATGGTGCAGGTGAAGTGCTGG | Chip | 1117.5 | 23.311127 | 0 | 483 |
| CTGGCAAGAAATATATATCTTA | Chip | 1119 | 5.1329703 | 0.56972069 | 6654 |
| AGGACCTGTAATCCCAGCACTT | Chip | 1119.5 | 4.0140038 | 5.6218853 | 269 |
| TGCCACCTGTACATGCTATCTG | Chip | 1121.5 | 4.0724583 | 0 | 7617 |
| GGAGTGCAATGGCGTGATCTCA | Chip | 1123 | 4.2392659 | 5.4389768 | 5760 |
| AGCCAGGGACGCTGCAGGCTAC | Chip | 1124 | 4.8854122 | 1.5954714 | 1043 |
| TGAAGGGGTGGCAGTGTGCTT | Chip | 1126 | 13.134897 | 0 | 6422 |
| TCCCCATTCCTCTCGGTGGTGG | Chip | 1126.5 | 5.5540628 | 0 | 443 |
| GCTAAGGGATAGGCTGCCTCCT | Chip | 1127.5 | 12.931028 | 0 | 4010 |
| TCTTCCTGGATGGGGTTGATG | Chip | 1128 | 8.9799547 | 0.79356724 | 977 |
| CCGAGGCTGGAGTCAGTGGCG | Chip | 1129 | 4.6293564 | 7.4294724 | 7855 |
| AATTCTGCTGAGCACTGGGCC | Chip | 1131 | 4.3391557 | 0 | 1991 |
| AAGTGCTCCATGTTGAGTGT | Chip | 1132 | 8.6608925 | 1.2182401 | 4641 |
| GGGCATGGTGGCAGGCACCTGT | Chip | 1136 | 14.535069 | 0 | 7986 |
| TCTCTAGTCTCCTTAACCTGA | Chip | 1148 | 5.2546234 | 2.501446 | 6395 |
| CGTGTAGCATGCCACCACCA | Chip | 1152 | 7.0432887 | 0 | 1625 |
| GACGGAGCTGGTTGCTGCGGCT | Chip | 1153 | 20.242882 | 0 | 5628 |
| AGTCTTCCCAGAGGAGGTGCCA | Chip | 1153.5 | 9.2534456 | 0 | 945 |
| AGGCTGGAGTCAGTTGCATGA | Chip | 1154 | 4.7976661 | 6.3405333 | 7994 |
| GTACACTCCCCCTGTGAAGTTG | Chip | 1154 | 24.610518 | 0 | 7047 |
| TGTCTGCCCAAGGTACATAC | Chip | 1156 | 5.5718279 | 0 | 5285 |
| TGTAGGGCCTAGGGGTATGGAT | Chip | 1157.5 | 7.6419687 | 0.25976887 | 6952 |
| TCACCAGGCTAGAGTGCAGTGG | Chip | 1159.5 | 4.8244257 | 6.5572648 | 6139 |
| ATTGCACATCTGCACTACAGCC | Chip | 1161 | 4.8118982 | 4.7992501E-2 | 4170 |
| TGTACCGCAAATGCTGCTGCCT | Chip | 1161 | 17.115875 | 0 | 4203 |
| CAACATGGCGAAACCCCATCTC | Chip | 1164 | 5.4955945 | 0 | 2105 |
| GCCCAGCACCTCTCAGGGTT | Chip | 1164.5 | 10.325441 | 0 | 3587 |
| GCCCTGTGCAGGTGTGCAGCAG | Chip | 1165 | 7.3230996 | 0 | 4409 |
| CAGGAGTTTAAATCTAGCATG | Chip | 1165.5 | 18.803524 | 0 | 5357 |
| TCTAAACTTGTAAACAAGCATA | Chip | 1166 | 4.7118134 | 0.48687607 | 637 |
| TCGACCTGCTGGCTCGGGCT | Chip | 1095 | 13.306955 | 0 | 2455 |
| TTTCTTGGTCTTCCGACCTGG | Chip | 1098.5 | 4.0137076 | 0 | 3818 |
| CACCCCTCAAGCAGTGGCACGTG | Chip | 1099.5 | 4.9113712 | 0 | 6541 |
| CTGTAACCTCCTTTCCATTTC | Chip | 1099.5 | 5.5274715 | 0 | 1308 |

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|-------------------------|------|--------|-----------|------------|------|
| TGTATATACACACTCCCATGTT | Chip | 1101 | 8.5892859 | 0 | 2582 |
| CTCCGGGTAGCTGAGGCCCTGG | Chip | 1140 | 4.6958904 | 3.793005 | 4115 |
| GGCGCTCAGTGTGCCCCAGAG | Chip | 1142 | 6.097331 | 0 | 8051 |
| CCTACCTGGGCAGGCCTCGGG | Chip | 1146 | 13.389938 | 0 | 4720 |
| TCGCCCCGAGGCAGCCCTATGC | Chip | 1168 | 7.6661062 | 0 | 5257 |
| TTGCTCAGTGGCAGGGCTGGTA | Chip | 1170 | 4.6446824 | 0 | 2869 |
| ATCAAGAGCACAGTGCTGGCAT | Chip | 1172 | 4.3064132 | 2.099376 | 2599 |
| CTGCAAGCTACCCCTAGCATCA | Chip | 1187 | 5.359941 | 7.49787 | 5126 |
| TGGGAGGCCAAGGCAGGCGGAT | Chip | 1193 | 4.9847255 | 7.2392049 | 3889 |
| GGAGGAGCATGAGAGGGTAGTG | Chip | 1193 | 31.27063 | 0 | 667 |
| GAGCTCATCCCCATGGTCCGTC | Chip | 1196 | 5.1633644 | 0.50441122 | 7471 |
| GGTTGTAGTTGGAGGTTGTATA | Chip | 1196 | 5.359941 | 0 | 1277 |
| CATCCAGGCTGGAGTACAGTGG | Chip | 1197.5 | 5.0059147 | 6.9278154 | 7521 |
| TCCAGCTCTGCTGTGCGCCGGT | Chip | 1200 | 9.279376 | 0 | 3798 |
| GTAATATGTGCTGAGTCCT | Chip | 1202 | 4.4296627 | 8.1321344 | 626 |
| CTCTGGCAATTGCTGCTGACTC | Chip | 1202.5 | 7.9471478 | 0 | 7180 |
| CCTCCAACCATAGGTCCAGGGG | Chip | 1203.5 | 8.3319702 | 0 | 6317 |
| CCTGTATCCCAGCATTTC | Chip | 1205 | 4.6656466 | 0 | 3228 |
| CAAAGGGAAAAGCCATGTGGGC | Chip | 1205.5 | 9.0012436 | 0 | 1930 |
| CATGAAATTGTATTGGCCTCAA | Chip | 1209 | 7.7022095 | 1.5365099 | 6133 |
| CTGAGGCAGGCAGATCACTTGA | Chip | 1210 | 4.8558879 | 3.7993965 | 6067 |
| CTGGGAGGTGGAGGTTGCATTG | Chip | 1213 | 9.390811 | 0 | 3857 |
| TTTGGGCAGGCTTTCCCTAGA | Chip | 1218 | 10.846725 | 0 | 2057 |
| TCCGGGAGGCAGAGGTTGCAGT | Chip | 1221 | 4.4037938 | 7.4545732 | 3674 |
| TGCTATGTCGAAAGGGCCATTA | Chip | 1198 | 5.2848206 | 2.3428149 | 4666 |
| GCTCCAGAATTCTAGTC | Chip | 1223 | 4.8854122 | 1.4486885 | 4032 |
| TTCTCCTACTTAAGGCCTTCCA | Chip | 1228.5 | 14.512917 | 0 | 972 |
| ATCGATCCCGCGTAAGGCCCG | Chip | 1231 | 5.1023388 | 1.2662603 | 2011 |
| CAGGAACAGGGTGTCCCTGGCAG | Chip | 1232 | 9.008337 | 0 | 7655 |
| GTGCTGTTGGAGAAGGTTCT | Chip | 1235 | 6.2430058 | 0 | 7293 |
| GGCTCTGTAAGTGTGCAGGTA | Chip | 1237 | 4.372324 | 0 | 2589 |
| TGGGTCAGAGGGAAAGTGTAT | Chip | 1240 | 5.4864416 | 4.4304075 | 4614 |
| AGTCCAGGCATTCCAGCCATT | Chip | 1241 | 8.3715305 | 0 | 6703 |
| GACCAGATCCCTTACCAAGCT | Chip | 1242 | 5.1947989 | 0 | 3391 |
| TCCCAAGTAGATGGGAATACAG | Chip | 1249 | 5.5675011 | 0 | 6551 |
| CCCAGCAGGTGCGCTGCTGCCTG | Chip | 1251.5 | 5.0099111 | 0 | 8004 |
| GAGGTGGCTGCTTGCTGGAAA | Chip | 1252 | 29.124226 | 0 | 5728 |
| TGCTGGAAATTGTTCTAGGA | Chip | 1252.5 | 15.828433 | 0 | 430 |
| GCAGGCCTGCGCTGCTCCGACG | Chip | 1256.5 | 6.7869315 | 0 | 7534 |
| CAAGACTTCACCGCTCTGTGCT | Chip | 1260 | 4.5691152 | 0 | 5375 |
| TACTATGGTTATTATCCCTCTCC | Chip | 1264 | 4.0216489 | 1.9981372 | 7280 |
| CTGGCTTTTCCATTATGCA | Chip | 1266 | 6.4070868 | 0 | 2486 |
| GCGTGTCCCCCGCGTCTC | Chip | 1266 | 7.5326686 | 0 | 7024 |
| CTGAAGGATGTGTGGTGGGAGT | Chip | 1268 | 4.7515168 | 3.1249597 | 4872 |
| GATATGGAAGGCCATGCC | Chip | 1268 | 8.8297272 | 0.48396423 | 3193 |
| CCAGGCTGGAGTATAGTGGCGC | Chip | 1270 | 4.4945917 | 7.4746661 | 3449 |
| ACCCTGCTTATGCCGTCTCT | Chip | 1273 | 7.5590324 | 0 | 2376 |
| TGATATGTCCTCGACATCAGG | Chip | 1273.5 | 4.8226123 | 7.3988724 | 7842 |
| CCCAAAAGTTCTGAGATGGCT | Chip | 1275.5 | 10.201685 | 0 | 5422 |
| TTGGGCAAATCACTAACGTCTCC | Chip | 1276 | 9.4896584 | 0 | 648 |

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|-------------------------|------|--------|-----------|------------|------|
| GCCCCATTAGTAGATTTAGT | Chip | 1277 | 7.2731838 | 1.3640915 | 3513 |
| TCACTGCACTTCAGGCTTCTC | Chip | 1280 | 5.9144082 | 0 | 4828 |
| GGAGTGCAGTGGCGTGAGCTCG | Chip | 1283.5 | 4.7879038 | 3.6301775 | 1057 |
| AAACACTGCCTACACTTATGAA | Chip | 1284 | 5.4590769 | 0 | 1923 |
| GGCTGCCTCCCTGAGCCCCGG | Chip | 1284.5 | 8.5892859 | 0.54547572 | 772 |
| AGCAGAGTGCCCATCCCGGA | Chip | 1287 | 5.9567142 | 7.4900131 | 3220 |
| CTTGGGAGGCAGAGGTTGCAGT | Chip | 1287.5 | 5.3808784 | 8.0099583 | 7083 |
| TTTGAAGCCATGTCAATAGTTT | Chip | 1288 | 5.1176653 | 8.6816092 | 869 |
| AAGGAGTCTGGGCCATTAGAG | Chip | 1290 | 4.8932362 | 0 | 7914 |
| AGCTGGAATTACAGGAGCCCAT | Chip | 1223 | 17.16337 | 0 | 1400 |
| TTCCTCCAGGCCATGATTGTAAA | Chip | 1226 | 9.0859766 | 1.2263082 | 5164 |
| GCTGTGGAAGTCTTATA | Chip | 1228 | 5.9354606 | 0.15779255 | 2120 |
| TCATGGGGCCACAGCTGCCAGC | Chip | 1294.5 | 12.411313 | 0 | 856 |
| TACCATCCAAGCTGGTTTG | Chip | 1295 | 5.434535 | 7.9920983 | 8053 |
| AGTGTGTTGAGGCTAAATGG | Chip | 1296.5 | 5.0562248 | 4.8389935 | 4175 |
| GAGCCTCGTGGCGGCCACTGCG | Chip | 1312 | 9.9640303 | 0 | 7286 |
| TCGCGCCCCCAAGCGTCATTGG | Chip | 1314 | 9.0965214 | 1.7637211 | 6420 |
| TTTCCTTCATATCCCTTATGT | Chip | 1319.5 | 10.305674 | 0 | 3604 |
| GACAGGCTTCCACTATGTTGCC | Chip | 1321 | 5.3749018 | 6.195621 | 3823 |
| CGGAGGTTGAGGCTGCAGTGAG | Chip | 1322.5 | 4.7339053 | 5.850657 | 6887 |
| AGATGCTGCTCACAGGCCAGG | Chip | 1327 | 7.0328341 | 0 | 5359 |
| TGCTGGTACCGCGCCTCCGCCA | Chip | 1330 | 11.998149 | 0 | 3979 |
| TGGTTAACCTCTGAGCAGGCTG | Chip | 1338 | 4.0301342 | 2.5747242 | 4247 |
| AGCCTGGGCCCTGCCTCTCTC | Chip | 1338 | 21.508947 | 0 | 5166 |
| GTGGGCATCACCAGGGCCTCCA | Chip | 1305 | 4.6559782 | 1.3485987 | 6123 |
| TCGAAGGCCTTTGCTCCTCGA | Chip | 1306 | 5.0408092 | 4.6041131 | 6035 |
| CTGAGGCAGGAGAGTTGCTTGA | Chip | 1306.5 | 13.451077 | 0 | 7811 |
| GCCTGCAGGGCCTGGCCTACC | Chip | 1339.5 | 4.2067757 | 2.7461035 | 4570 |
| CACCTAGGGTTCGCCTTCTT | Chip | 1351 | 15.235478 | 0 | 2596 |
| GTGTTGGTCAGACGTCCGGGG | Chip | 1353 | 13.306586 | 0 | 8012 |
| AGGCCGAGGCAGGGCGGATCACC | Chip | 1354 | 5.2067318 | 8.9456701 | 2641 |
| TACCATGCTCTGCATCTCACAA | Chip | 1357 | 4.5191474 | 5.9251785 | 6839 |
| TGTCCAGATCAATGCCACATG | Chip | 1308.5 | 4.5347557 | 0 | 7987 |
| CCCGACCTCGCAAAGCGCACTC | Chip | 1312 | 6.3757839 | 0.11276147 | 6582 |
| AGTGGGTGTAGTCTCCTCCTG | Chip | 1362 | 6.5083675 | 0 | 2500 |
| CCCTCTGCATACAGGCGAGGAG | Chip | 1363 | 11.684633 | 0 | 5508 |
| CCCTGGAGGTTGAGGCTGCAGT | Chip | 1366 | 4.2553997 | 5.5404139 | 4388 |
| TCGGGCTGCTCGCTGCGGAAC | Chip | 1366 | 9.8098183 | 0 | 2122 |
| TGGCCTTGAGAGATCAAAGGT | Chip | 1368 | 4.743588 | 0 | 691 |
| CTGGGAGGCAGAGGTTGTAGTG | Chip | 1370 | 4.1524282 | 5.7353191 | 7711 |
| ACTCTGCGGAGGCCAG | Chip | 1370 | 6.9943829 | 0 | 6042 |
| TGTCCCCACCTAAATCTTATCT | Chip | 1372.5 | 7.1852641 | 0 | 4552 |
| CTGCCAGTGTGCTCTCCG | Chip | 1373 | 5.9488397 | 0 | 7149 |
| GTCTCGGACTCCTGATCTCAGG | Chip | 1380 | 4.1414785 | 3.9894354 | 114 |
| CCGGGAGGCAGAGGTTGCAGTG | Chip | 1381 | 4.9182892 | 7.8679495 | 7712 |
| GTGCCGACGCTCAGCACCATCC | Chip | 1384 | 5.1635141 | 3.8417749 | 2478 |
| GTGCGGGCCTGGGGGTTCTCT | Chip | 1384 | 18.114849 | 0 | 3598 |
| ACCCAGGCTGGCGTGCAGTGGC | Chip | 1413.5 | 5.045722 | 6.4478707 | 5104 |
| AGTGGCGTCCTAGGAAAGGAGG | Chip | 1414 | 4.1230264 | 6.3407669 | 7692 |
| TAGAGCTCTCCTCTGTGG | Chip | 1417 | 5.2848206 | 0.87858063 | 7229 |

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|--------------------------|------|--------|-----------|------------|------|
| CACCAAGGAGGACAGGCCCTAC | Chip | 1419 | 13.13129 | 0 | 8018 |
| GCAGAGTGCTGTCGTACGCCCT | Chip | 1421 | 4.527245 | 1.0200601 | 7165 |
| TCACTGCACTAGGTAATGCCAC | Chip | 1425.5 | 10.130198 | 0 | 3645 |
| TCCGATGCTTCCAGGGCCACCT | Chip | 1426.5 | 4.9516306 | 0 | 5809 |
| TAGCCCTTGTGCTGCCAGG | Chip | 1434.5 | 21.951159 | 0 | 1412 |
| GACCTGGTCCTGTACTTGAA | Chip | 1436 | 4.3488479 | 0 | 4489 |
| CTGCTGCCGGAGACTCGTC | Chip | 1437 | 4.8540587 | 2.4149714 | 4229 |
| CCCATGCACCCCTAAGAAGGA | Chip | 1438.5 | 4.0893412 | 1.2592272 | 3461 |
| CCACTGTGCCAGCCTATGGG | Chip | 1439.5 | 5.8070397 | 0.48357451 | 7531 |
| ACCCCTGCTTATGCCGTCTC | Chip | 1439.5 | 7.5649986 | 0 | 6708 |
| CCCACGTCGAACCTGCTCCAGA | Chip | 1441 | 5.367424 | 0 | 5065 |
| TCTTTGGGCCGACACTCGTCAA | Chip | 1441 | 19.545538 | 0 | 1518 |
| CTCCCAGCCTGCCAGTCTGA | Chip | 1442 | 9.3773403 | 0 | 6102 |
| AGGCCAGCCTGCCAAAGCTGC | Chip | 1444 | 6.8652005 | 1.3340253 | 475 |
| AGGGTGGCACTGGTGGCTCTAT | Chip | 1448.5 | 15.814425 | 0 | 3334 |
| GGGTCCAGTAGTTGGTGGCCGT | Chip | 1450 | 4.3641071 | 5.6165838 | 7607 |
| TTTCACCACATCTTGGCCAGGCTG | Chip | 1450.5 | 5.8872299 | 6.5283771 | 2728 |
| GAGAAATATGGCTCAGTCCAC | Chip | 1451.5 | 5.3449593 | 6.0128675 | 5868 |
| TAGATAACCTGCTGGACCTCATT | Chip | 1454 | 6.7387171 | 0 | 595 |
| TCCTGGGGAGGGGCATGGC | Chip | 1454.5 | 4.2763 | 1.1393887 | 1299 |
| CGGGCAAGGCGAGACTAGGCC | Chip | 1455.5 | 7.4837284 | 0 | 3948 |
| GAGAGAGCTCTGCGCTGGGAT | Chip | 1460 | 4.1398292 | 2.7307003 | 6905 |
| GCCTGGCTCGGAGCCGC | Chip | 1460 | 4.5353365 | 2.3478167 | 4990 |
| TTCTCCACCCACTCTTTGTTG | Chip | 1465.5 | 4.1733551 | 1.1209452 | 5717 |
| AGCTGGTGTGCCAGTCCAGTT | Chip | 1466.5 | 6.2705288 | 0 | 4908 |
| GAGGCCTCAGCCTGCCCTGAAC | Chip | 1470.5 | 8.6883059 | 0 | 4760 |
| ATCAGAGTAGTTGTTGCCAGA | Chip | 1471 | 5.5012255 | 7.6935115 | 4344 |
| GAGGCTGAGGTTGCAGTGAGCC | Chip | 1399 | 5.0199966 | 6.459177 | 777 |
| GCGGTTAGGCCAACCTCCCTG | Chip | 1403 | 4.4819179 | 0 | 3281 |
| TTTTGGGTCCAGGCTGTATCT | Chip | 1410 | 4.6210666 | 0 | 6468 |
| TGTCTCTTCAAGCTACCCCT | Chip | 1480.5 | 10.980006 | 0 | 4041 |
| CATTCTGCGATCCTCAAGCACA | Chip | 1481 | 4.0957041 | 9.367939 | 3534 |
| AGGCTTACAGCAGCAGGC | Chip | 1484 | 7.5204544 | 0 | 3336 |
| TGCCTGCTGTATTCCAGAG | Chip | 1491 | 5.1635141 | 7.662797 | 3503 |
| CCCAGCGAGTTGCCGGTGAAC | Chip | 1491.5 | 11.314644 | 0.20919423 | 3557 |
| CCTGACCAACGTGGTGAACCC | Chip | 1473 | 4.440289 | 5.3721399 | 8042 |
| CTGCCCCCAGCCTGGCTTCGA | Chip | 1502 | 5.1329703 | 2.1353233 | 2868 |
| TGTCCCTGCAAATAACAT | Chip | 1509.5 | 5.3898416 | 8.1098919 | 4499 |
| GCGACTGTACAGAATTGCCCT | Chip | 1510.5 | 4.7910733 | 0 | 5071 |
| GAAGTGGGAAGCAGATGCCA | Chip | 1511 | 7.0838871 | 0 | 7066 |
| TTGTGCTGCCCTGGAGGTGCG | Chip | 1512 | 14.006866 | 0 | 3520 |
| AAAGTGGTGGATTACAGGTGT | Chip | 1516 | 5.4616389 | 13.160688 | 2968 |
| TAGCTGAATTGTGGAGACCTA | Chip | 1518.5 | 16.595257 | 0 | 3728 |
| GGGAGTGGTTGGCCTAGGCC | Chip | 1525 | 6.2015877 | 0 | 5640 |
| CTGCGTGGTAGGACTCAGTTCT | Chip | 1526 | 10.815386 | 1.3908418 | 1946 |
| CGGCTGGGTTCGGCTGCAGGCC | Chip | 1527 | 5.6272283 | 0 | 2275 |
| AGTGCTATCGAGTTCTAATGCT | Chip | 1529 | 16.626472 | 0 | 1560 |
| TCAGTGCACCCATTCTCTCCA | Chip | 1529.5 | 9.8785877 | 0 | 428 |
| CCAGCAGCCACCTCTGAAAT | Chip | 1530 | 7.9632921 | 0 | 6291 |
| ACTCCACACCACGGGGGCCGCC | Chip | 1533 | 4.6035237 | 0 | 4308 |

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|-------------------------|------|--------|-----------|------------|------|
| AAGTCCAGGTCCATTCCATC | Chip | 1540.5 | 4.019371 | 0.11170638 | 498 |
| GGAGTGCAGTGGTGGGATCTCA | Chip | 1541 | 5.5753407 | 8.2118359 | 2002 |
| CTGGCAGATAGTAAGTGATCAA | Chip | 1553.5 | 4.0555487 | 0 | 6938 |
| TTCACTGGCCTTATAGGAAC | Chip | 1556.5 | 4.4303179 | 5.0737081 | 4213 |
| CAGGAGGTTGAGGGTGCAGTGA | Chip | 1559 | 5.1060648 | 7.4941492 | 1503 |
| TTGTCCTCTTCATTCACTCCC | Chip | 1564 | 4.1307983 | 5.7667861 | 1467 |
| TGACCTCCTGGGCTCAAGCC | Chip | 1564.5 | 15.357349 | 0 | 1167 |
| GACTACAGGTGTGCCACCAT | Chip | 1565.5 | 4.6719613 | 4.2952833 | 7244 |
| AGCCACCACCACTGAAAGGTTA | Chip | 1567 | 5.0253716 | 0 | 4761 |
| TCAGCCTGCTCCAAGTGCTGCC | Chip | 1568 | 12.860962 | 0 | 3558 |
| CCTCATTCTCGCGTGTGTTCT | Chip | 1578.5 | 5.1122966 | 0 | 2091 |
| GCAGGCGGAGGTTGCAGTGAGC | Chip | 1579 | 4.3141651 | 8.2424784 | 5063 |
| GGCTGCCCTCTGCTCATCT | Chip | 1579 | 5.328373 | 0 | 2071 |
| TGGGGTCAGCAGGCCTGGCCTG | Chip | 1581 | 7.7980194 | 0 | 6480 |
| TCCTGCCAGGAGATGGTAGCCA | Chip | 1584 | 12.534106 | 0 | 2088 |
| AGGGTCCTGGGTGCAGTTGCTT | Chip | 1586 | 6.5595541 | 0 | 7693 |
| GGCGGAGCTGCAGTGAGCCGA | Chip | 1587 | 4.3907022 | 2.4575887 | 3787 |
| ACTTACCAAGAGAGGATCCGCC | Chip | 1587 | 5.1329703 | 1.094794 | 2757 |
| TACCCAAGGCCCTTCAATTTC | Chip | 1589 | 8.489337 | 0 | 2986 |
| TCACTTCGTAACCCCCCTCCAT | Chip | 1550 | 13.593632 | 0 | 6867 |
| GTATGGCACTATCCTCTTGAT | Chip | 1571 | 24.833906 | 0 | 4327 |
| CAGGCCCTGTGCTGGGTGATGT | Chip | 1601.5 | 4.6276236 | 0 | 1275 |
| TACGGTCAGTCCGTGCCCAAG | Chip | 1602 | 9.7207422 | 0 | 3755 |
| CTCTGAGCTGCCTTTGAGCTT | Chip | 1602.5 | 4.3898053 | 5.8146801 | 447 |
| CGCCCAGGCTGGAGAGCAGTGG | Chip | 1602.5 | 5.2608914 | 6.5835171 | 5998 |
| CATGCCTGCCTGGTGGCGTGG | Chip | 1603 | 4.7668376 | 0 | 7402 |
| CACTCTCACATGCCCTGTCAGT | Chip | 1605 | 5.8743162 | 0 | 1357 |
| GGGTCCCCTGCCGTCTG | Chip | 1595 | 10.438149 | 0 | 3859 |
| AAGTGCCTGGATTATAGGCATG | Chip | 1598 | 4.0027814 | 6.5471692 | 5406 |
| TGGTTGGATGGCTTTGGCT | Chip | 1607 | 4.778492 | 0.20456694 | 947 |
| TGGCTCCTCACGTCCCTCAGAGC | Chip | 1612 | 5.3898416 | 4.4133153 | 5444 |
| CTGAGCTCAAGCGATCCTCCA | Chip | 1617 | 17.222479 | 1.5567338 | 4058 |
| CTCCTCGTAACTCTGTGGTGGGT | Chip | 1619 | 4.0893412 | 3.654083 | 6909 |
| TGCGGGCGTTCGTTACCACTT | Chip | 1630 | 8.985281 | 0.38893801 | 2664 |
| TACTGTGTGCCAGCCGAGCTG | Chip | 1632 | 5.7854853 | 4.7016063 | 687 |
| GTCCCAAACCTCTGACCTCAGG | Chip | 1638 | 4.5023069 | 7.1563048 | 3847 |
| TGTTCCGACCGTGGGTTTGAT | Chip | 1640 | 6.429172 | 0.97111171 | 696 |
| TTGGAATGCACACTGAGCCTGC | Chip | 1641 | 5.4196582 | 4.3278909 | 4024 |
| CCTACTCTGAGCGCCTCCGCAT | Chip | 1642.5 | 9.0701408 | 0 | 6338 |
| CCCGGAGGCAGAGGTTGCAGTG | Chip | 1643.5 | 5.8650842 | 6.6221547 | 4488 |
| GTCGATCACCTCGTCCTCCGT | Chip | 1646.5 | 6.641264 | 0 | 1036 |
| CAGGCTGGAGTTCAGTGGTGTG | Chip | 1648.5 | 4.3088479 | 8.9180403 | 3134 |
| ATTGTGCCTCATTGACCTCA | Chip | 1653 | 4.2317729 | 3.5594997 | 812 |
| TGTCCTTATCTCCAAACATCA | Chip | 1654 | 4.2171164 | 8.9267464 | 6838 |
| ACACAGAGCCAACCATATCAC | Chip | 1680 | 13.610887 | 0 | 4075 |
| AAAAGGGACGACAACAGGCCAC | Chip | 1681 | 5.1176653 | 0 | 6798 |
| GCTCTGAGTCACACTGCCCTGT | Chip | 1683 | 5.226552 | 0 | 1556 |
| ACAGGATGCCCTGTTGCCAG | Chip | 1683.5 | 4.9010544 | 0 | 7758 |
| TTAGGCCTTGATTGGGGTGCT | Chip | 1685.5 | 4.1420093 | 7.9094262 | 7449 |
| TTGTCTTTGTGGGAAATATGG | Chip | 1686 | 9.2690115 | 1.0731497 | 7843 |

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|-------------------------|------|--------|-----------|--------------|------|
| TGCCCGAGAGCCTGAGAGGATTA | Chip | 1690.5 | 7.2606683 | 0 | 4109 |
| CATGTGTGTCCTCCACCAGCTGC | Chip | 1697.5 | 22.671108 | 0.19794025 | 5242 |
| TGATCAGCATCTTCCCAGCTCG | Chip | 1698 | 5.6260681 | 4.4475961 | 8104 |
| ATCTCAGTTCAGGCTCCACTGT | Chip | 1699.5 | 12.996984 | 0 | 807 |
| GGCTGTGTGGCCGTGGGCTCTA | Chip | 1700 | 4.3887382 | 4.3097105 | 1039 |
| TAGCTGGGACTACTGGCCCTGC | Chip | 1706 | 12.916316 | 1.5355051 | 5859 |
| ACACAGGGCTGCGCCTGACCCC | Chip | 1707 | 7.7022095 | 0 | 2010 |
| TGAGCTCAAGCAATTACCCGC | Chip | 1707 | 13.724072 | 0 | 5592 |
| CTTATCAGATTATCTGGGCTGT | Chip | 1707.5 | 8.2751999 | 0 | 6172 |
| ATGTCATGAGGCTAGCCCCAA | Chip | 1710 | 7.9632921 | 0 | 8009 |
| CCTGTATACATACCTCCTC | Chip | 1712 | 4.1733551 | 4.783987 | 5607 |
| ATCGGCAAGCCCCACACCGTCC | Chip | 1713 | 4.0142264 | 9.0132332 | 1087 |
| TCTGCAACATTCCCTCTCCCCAC | Chip | 1721 | 6.2299123 | 0 | 2222 |
| CCACCAGCTGCATATGCACGTA | Chip | 1730 | 4.4214902 | 1.1879559 | 6943 |
| CTCTGGAGTCATTGCTCCC | Chip | 1730.5 | 7.3355422 | 0 | 4042 |
| GAGTGCCCTCCCCATGCTTG | Chip | 1731 | 5.1558862 | 1.9091915 | 3358 |
| CAGGAAGGGGGCTCACTCTGGCC | Chip | 1734 | 6.2842641 | 0 | 6354 |
| TGCTTATATTCATTGGCCAA | Chip | 1737 | 5.1939707 | 0.85535181 | 2940 |
| GGCGCCCCCTTCAAACAGAGCA | Chip | 1745 | 4.7277126 | 8.7167349 | 5245 |
| ACGTGCTGGAGAAGAGCTCGCC | Chip | 1754 | 4.0640068 | 0.98060691 | 1541 |
| TTGTGGGATCTCCCTGTTGCTC | Chip | 1754 | 5.2395482 | 0 | 3715 |
| TGGTCTGCTGAACAGCCGTATC | Chip | 1757 | 4.743588 | 1.0271198 | 1855 |
| CCGAGCTGTGGTCTCTTTACG | Chip | 1759 | 4.1230264 | 8.2524004 | 6239 |
| ACAGTCCAGCCTAGTATGTATA | Chip | 1760 | 5.992043 | 1.5357794 | 7694 |
| TCTTGGGCAGCTTGCTCGCCCC | Chip | 1661 | 7.7022095 | 0 | 2289 |
| AGCTTTGGTTGCCATGATCTGA | Chip | 1665 | 5.5821729 | 10.27639 | 3258 |
| CACTGCAGCCTCGCTCTCCTGA | Chip | 1676.5 | 5.3898416 | 0 | 5252 |
| CTGGGGTCCTGCCATGTGTCA | Chip | 1677 | 11.498288 | 0 | 6809 |
| TGACAATGAGGCCCTCCACAAA | Chip | 1679 | 5.1023388 | 2.1864455 | 1150 |
| GGCTCTCCGCCACCAGCCACA | Chip | 1624 | 4.4541421 | 1.0276202 | 6374 |
| CTTGCTTTCAGTCTCGGCCTCA | Chip | 1763 | 4.0555487 | 1.144424 | 4424 |
| CTATTCTCATAGTTCAGGTCTT | Chip | 1767 | 4.5998492 | 5.3045797 | 5073 |
| TGGCCACCACCAATACTGCCT | Chip | 1777 | 4.5837574 | 0.96471441 | 1591 |
| TGGCTCTGCGAAGGCACA | Chip | 1778 | 4.1314311 | 4.1464405 | 4677 |
| CCATGAATTCACTCCATGCTAG | Chip | 1780.5 | 7.6721315 | 0.20065525 | 4028 |
| CGGAGTCTTGCTATGTTGCCA | Chip | 1781 | 5.2067318 | 5.238801 | 2219 |
| GGTAGTCGGCCTTGCCTGGC | Chip | 1782 | 5.1635141 | 8.7292385 | 7953 |
| TGAGATGGAGTCTCGCTCTGTT | Chip | 1785 | 5.1520457 | 7.9560995 | 604 |
| TTGCGCGCGCTAGGTCTCGGT | Chip | 1768.5 | 8.527442 | 0 | 6145 |
| TCTCTATTGCTAGGCTTG | Chip | 1775 | 4.0386124 | 5.2510257 | 2607 |
| CAGTGCCAGCTGCTGGCCTAC | Chip | 1791.5 | 14.129085 | 0 | 1648 |
| AAAATTGCTCTGCAAGTCCCC | Chip | 1798 | 5.1055784 | 0 | 3905 |
| CTCCTTTAGCCCCAGCTGGA | Chip | 1799 | 4.2898717 | 8.4259157 | 7592 |
| GGCCTCCCGGACCGCAGCGCC | Chip | 1805 | 4.6958904 | 2.6645198 | 1598 |
| CCCGGGAGGCAGAGGTGCACT | Chip | 1794 | 5.9571199 | 9.9902372 | 7763 |
| TCACCGTCGGGGTCGCTGTCT | Chip | 1810 | 5.033093 | 2.9273572 | 6394 |
| GGTCAGAGCCTGCCAGTATA | Chip | 1813 | 10.913574 | 0 | 7126 |
| GTCCTGGGGATTATAGAGTGT | Chip | 1823 | 6.0381451 | 0.53414297 | 722 |
| TGGGATGCTCAGGGCCTGGAGC | Chip | 1824 | 8.0682802 | 0.78988832 | 1505 |
| AATCCCTCCCCAGGCAAGTCCT | Chip | 1827 | 4.7700205 | 4.2900171E-2 | 6540 |

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|-------------------------|------|--------|-----------|------------|------|
| GTTGGTCCTTGAGCAAGATCC | Chip | 1828 | 5.0426106 | 0 | 1908 |
| CCAGGAGGCAGGAGGTTGCAGCG | Chip | 1831 | 4.9563489 | 9.9608593 | 7048 |
| AACCCGGGAGGCAGGAGGTTGTG | Chip | 1833 | 5.103756 | 10.290462 | 7934 |
| GCCCCATAGTCTCTTCTTCTT | Chip | 1838 | 10.300968 | 0 | 4961 |
| GACAGCTCCAGCTCCTCCAGGC | Chip | 1845 | 4.1900787 | 8.3998461 | 5092 |
| GTATGTGAGGTTGGTTCCAGG | Chip | 1848 | 15.93024 | 0 | 7718 |
| TTTCACTCAGCTCTCATTGTCT | Chip | 1852 | 5.5248971 | 7.513772 | 5411 |
| CCAGGTTGGAGTTCAGTGGCGC | Chip | 1854.5 | 4.1551623 | 4.9337268 | 4246 |
| CAGGAGCTCAGATGACATCTCA | Chip | 1856 | 4.9010544 | 10.314 | 7857 |
| GGGGTCTTGGAACAGGTGGCCCT | Chip | 1856 | 5.8785758 | 0 | 4982 |
| CCCCTCTGGCATTGAGTGCCA | Chip | 1860.5 | 4.9355788 | 0 | 453 |
| CTGAGCCTCCTGCTTCTATTTC | Chip | 1864 | 5.9849868 | 3.7265418 | 5270 |
| TGGTGGCTCACGTCTGTAAATCT | Chip | 1871 | 25.099676 | 0 | 3670 |
| ACAATGCTCCCTGTAGTCAGGA | Chip | 1874 | 4.6958904 | 7.40031 | 5896 |
| GGGTGTGTGCAGGGCCTGGT | Chip | 1891 | 5.4895329 | 0 | 5967 |
| ATGGGGTGAGTGACGCCCTC | Chip | 1899 | 5.8571658 | 1.7462343 | 1126 |
| TCGCTCAGGCAGGAGTCAGTG | Chip | 1902 | 5.7879028 | 8.7315207 | 27 |
| CCTGGCCGACATGGTGAACGC | Chip | 1905 | 9.3362026 | 0 | 3556 |
| TTCAACAGACCCTCTTCTT | Chip | 1906.5 | 5.6843143 | 2.0226388 | 6431 |
| TCACTTCCCAGACGGGGTGGCA | Chip | 1907 | 4.2122374 | 7.5382385 | 694 |
| GGCCATTGCTTATTCACTTC | Chip | 1907 | 4.3014822 | 8.9858618 | 7247 |
| ACTGTGTGCCAGGCGCTGGTCT | Chip | 1908 | 4.0770178 | 0 | 5878 |
| GCCCAGGAGGAGAGGCTGCAGT | Chip | 1922 | 4.5738077 | 5.7069306 | 4395 |
| CTCGAGAGATCCTCTGCCACC | Chip | 1926 | 7.0200324 | 1.6254758 | 5914 |
| TCACTGCGCTTCAGCCTGGGTG | Chip | 1929.5 | 5.5291867 | 1.1913716 | 3471 |
| CTCAGATCTTCCCCATTTCCC | Chip | 1937 | 4.5676417 | 6.4788637 | 6853 |
| TCTTATACCCCTAAACTGCAGC | Chip | 1938 | 4.9789224 | 0.47636697 | 5387 |
| TCCAGGGCCATCTCCATGAGGC | Chip | 1948 | 5.4790416 | 9.0826721 | 5633 |
| GTTTACTGTGCCCTGGCTAA | Chip | 1948.5 | 23.074245 | 0 | 5615 |
| GCTGTCTCATACAAGGCCCTGC | Chip | 1952.5 | 5.1329703 | 1.1484865 | 596 |
| TGGTAGGTACTGGCTTCAGGC | Chip | 1959 | 5.7638865 | 10.948694 | 4635 |
| TGCCTAGGCTGGAGTGTAGTGG | Chip | 1960 | 18.811989 | 0 | 1630 |
| TGCCGCAAGTACTGCTGCCGT | Chip | 1966.5 | 5.8571658 | 3.7118392 | 2947 |
| TTTGGTGTCCGGTCATTGCTG | Chip | 1967 | 4.1357851 | 5.2781134 | 2161 |
| CTGCCCGCACCATCCCCGGGCT | Chip | 1967 | 5.5675011 | 7.4003267 | 3490 |
| AAGCCTGGCACATTGGAGTCG | Chip | 1972 | 23.70438 | 0 | 3349 |
| TTCTTCAGCCTACCTTGACCTC | Chip | 1982 | 4.5595746 | 0.49319306 | 6851 |
| TGATCTCGTGATCTACCCGCCT | Chip | 1982 | 5.9927278 | 6.810081 | 30 |
| CCTGCACAGCCGGACCCCTGCT | Chip | 1988 | 5.7277908 | 0 | 6533 |
| TAGAGTGTATAACAGTGCCCA | Chip | 1991 | 9.5302086 | 1.9559761 | 1846 |
| TTCGCCAGCTCCAGGCTGCC | Chip | 1992 | 6.3293457 | 0 | 4444 |
| CACGGCCACTGCAGCACCCCCAG | Chip | 1913.5 | 5.9849868 | 0.27124041 | 6093 |
| TAGATTATCCCTGATTGTCCA | Chip | 1914 | 4.1926575 | 0 | 3368 |
| GTCTCCACTGGGGGTTAACCC | Chip | 1997 | 10.673612 | 0 | 5139 |
| CCCTGCCCTGTCTGGGCTAGGT | Chip | 2002 | 4.0046587 | 9.0806446 | 1273 |
| CTCATTGCCAGATCCCCACAG | Chip | 2016 | 4.838347 | 8.3423147 | 2388 |
| CCGTGGGGGGCCCGTCGCCCTG | Chip | 2017 | 4.7752681 | 3.6123621 | 6214 |
| GCGTCTCATCCTCCCGCTAATT | Chip | 2019 | 4.072968 | 2.8117723 | 1383 |
| CCTGTGGTGCCAGATGCCAG | Chip | 2019 | 4.3676271 | 0.76802272 | 2175 |
| GGGGTCTGGGCTTAGCTGGAAT | Chip | 2025.5 | 12.380392 | 0 | 1356 |

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|------------------------|------|--------|-----------|------------|------|
| CAAAGTGTGGGATTACAGGCT | Chip | 2028 | 5.1953826 | 10.857911 | 3663 |
| ATGCCCAAGTGTGTGCTTCCTT | Chip | 2031 | 17.004122 | 0 | 7137 |
| AAGGGCCTGCCAGCTTCTCATG | Chip | 2031.5 | 13.091538 | 1.1311569 | 5553 |
| GAGGTGGCGGATCACAAAGGTC | Chip | 2041 | 5.9412212 | 9.3532887 | 3999 |
| CTGGGGTAGGAGGCAGCTGTGC | Chip | 2041.5 | 4.1482224 | 0.28055555 | 3971 |
| CTGGGCTCAAGTGATCCACCCA | Chip | 2046 | 4.3300858 | 5.4814286 | 8138 |
| GCCTGGATTCCCTGTTCTCAG | Chip | 2049 | 4.3417811 | 7.2988648 | 7480 |
| TCTCTCTGCAGCCCGGGACACT | Chip | 2050 | 4.9355788 | 0 | 2281 |
| TTGGCCTGGCGCGGTGGCTCAC | Chip | 2052 | 5.0408092 | 5.1451149 | 973 |
| GGGCCCAAGAACCTCCTCCTG | Chip | 2056 | 8.5116291 | 1.1281486 | 1621 |
| GAGCTGGGCCTGCGAGTGCTGC | Chip | 2060.5 | 5.0099111 | 1.7965864 | 7880 |
| TCTTGAGCTTATCCAGTTCT | Chip | 2066.5 | 4.1145458 | 9.719533 | 6198 |
| GCTGTCCAGCCCTGTTCACCT | Chip | 2068 | 9.5504265 | 0 | 668 |
| AATAAACAAATCCTTCCTTCCC | Chip | 2070 | 4.1082759 | 0.80227709 | 1593 |
| CGCATGAGACCTGCCGGCCATC | Chip | 2073 | 16.943785 | 0 | 4458 |
| TGTATAGTGTGGTAGCAGTGG | Chip | 2076.5 | 17.239656 | 0 | 1513 |
| ATTCTTGGATTGGCTAGTG | Chip | 2081 | 5.359941 | 9.4660416 | 3061 |
| TAGTTCATCTCCACCCCTGCC | Chip | 2083 | 5.655231 | 0.15956412 | 4810 |
| GTTGGCCAGGCTGGTCTCAATC | Chip | 2090 | 9.4693241 | 0 | 1574 |
| GCTCCTTATTTCTCTCGTGT | Chip | 2092 | 4.9322701 | 6.8224359 | 920 |
| CCCGGGAGGTGGAGCTGCAGT | Chip | 2094 | 5.0106125 | 8.1183786 | 8135 |
| GGCCCGGTGACGTCACT | Chip | 2095 | 6.9428978 | 0 | 5340 |
| CATTCTGGACCAAGCTGGGTGC | Chip | 2099 | 9.7008457 | 0.40787405 | 7059 |
| TCTCCTGGAGCCCAGATGCTGG | Chip | 2100.5 | 4.8226123 | 5.4119086 | 7179 |
| GTGGCCCCAGGGCCCTGCTGG | Chip | 2103 | 4.3064132 | 5.4394917 | 6549 |
| TGCCACCCCGGACCCCGAAGTG | Chip | 2106 | 4.6232533 | 7.5721364 | 6993 |
| GTTCCCACCATGCTGCACCCAT | Chip | 2107 | 5.8285513 | 8.8833447 | 6184 |
| AACTCCTCTGGTGGTCGTC | Chip | 2112 | 4.0128498 | 0 | 4605 |
| CTGGGAGGCAGCTTGAGCTG | Chip | 2035.5 | 5.6867909 | 7.8000135 | 7741 |
| GCCAAGGCCCTGCTGTTTAC | Chip | 2118 | 4.2000122 | 8.7488194 | 5165 |
| CCCCCGGTTCTGTTGCAGAG | Chip | 2118 | 20.762581 | 0 | 6679 |
| AGGGAAGCAGCAGCCGCTGTC | Chip | 2129.5 | 4.2952938 | 0 | 5001 |
| CGAGTGTCCCTACCATTCCTA | Chip | 2137.5 | 4.9944282 | 3.8092749 | 1234 |
| GCCCAGCCACAGTCACTTCAT | Chip | 2139 | 4.7320642 | 8.6496077 | 5573 |
| CACCTTGTGATCCACCCGCC | Chip | 2139 | 5.5668392 | 4.7121377 | 282 |
| CTCACCTCCGGCTGCTCC | Chip | 2144 | 13.513897 | 0 | 7159 |
| CGTCTGGCTTCTCCACGGTAA | Chip | 8462 | 5.8395977 | 11.586881 | 1512 |
| GAGCGCCGCTCACCTCCCTG | Chip | 2146.5 | 6.9170618 | 0 | 7839 |
| GGGCTGGATTGCTGCTGTGA | Chip | 2148 | 14.562239 | 0 | 1729 |
| AAAGTGTGGATTACAGGCGT | Chip | 2149 | 5.4638057 | 13.107788 | 6208 |
| CCGCCACCTCTAACGCTGGTC | Chip | 8413 | 8.866951 | 0.18543215 | 6816 |
| AGTTCTTGTGCTTCAGCCTCC | Chip | 8418 | 11.501246 | 1.3339518 | 274 |
| CTGGCCTAAAAATACAGAACAA | Chip | 8784.5 | 8.013813 | 0 | 2976 |
| GCCCCAAGTCCCTATGTTCCA | Chip | 8950 | 12.678107 | 1.0439761 | 762 |
| GCAGGGAACTGGCTGGCTTTC | Chip | 9142.5 | 5.9037857 | 16.801399 | 93 |
| GCTCCCACGTGCTGCCAT | Chip | 9433 | 17.716768 | 1.6475885 | 2 |
| TGTGGGTGGCATCGTCTGGCC | Chip | 9679.5 | 8.4513817 | 0.49652323 | 1812 |
| GCTGGCACAGATCCCCAGGGA | Chip | 10408 | 33.552021 | 0 | 7579 |
| AGCGGCTGGCGGAGGACACG | Chip | 8764.5 | 5.8134389 | 21.684513 | 4945 |
| CCCTCCCGCGTGTGGCTCG | Chip | 9059 | 16.644638 | 0 | 5789 |

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|-------------------------|------|---------|-----------|--------------|------|
| AGCTGGAGATGAGTGACGTGCC | Chip | 10661 | 16.698954 | 0.85748941 | 3793 |
| CCGGTCTGTACTTGCTGGCC | Chip | 10835 | 20.656384 | 0.65039492 | 680 |
| AAAGATGTTGCTGCTCCGCCCT | Chip | 10873 | 15.461 | 0 | 3748 |
| CAGCCCCACACGGCTAGCTCT | Chip | 11400 | 15.806011 | 0 | 7629 |
| CCTGGCCTTGAACGCTAGACT | Chip | 11406 | 7.2856851 | 0.75884587 | 3686 |
| CCCCTCAGTTGCTAGTATTT | Chip | 11735 | 24.905746 | 1.1986766 | 178 |
| GACAAGCTCCCAGTGGCCCTCC | Chip | 12851 | 18.126135 | 0 | 2459 |
| GTACATCCCCAAAGCCACGCC | Chip | 12166 | 27.10388 | 0.65009803 | 5582 |
| GCCAGCAGCTTCTCATCCT | Chip | 12277 | 9.6344414 | 0 | 1867 |
| GCCCTCCTGAGCTAGCACGT | Chip | 12521 | 13.062534 | 0 | 953 |
| CCTGCTGGCTCTGTTGCTCGC | Chip | 13366.5 | 22.352903 | 0 | 1272 |
| CCAGACTGCTTGCTTCCCAGCC | Chip | 14958 | 21.881628 | 0 | 1675 |
| GGAATCCTGCCAGCTCTGCC | Chip | 13916 | 20.750246 | 2.1075698E-2 | 2965 |
| GCCTGCCGCCTGGCTGAGAACTG | Chip | 14243 | 18.883669 | 1.0151415 | 6189 |
| CTCGCCCCCTCTCAGCCCTGCAA | Chip | 14248.5 | 19.352268 | 1.4588933 | 298 |
| GCCTGTCCTCTTCCGCCTGTCT | Chip | 14508 | 12.145576 | 1.6282115 | 205 |
| AGCCCCTTGGTACTGTCT | Chip | 9378 | 18.433018 | 1.0831363 | 880 |
| GCCTGGCCAACGTGGTAAACC | Chip | 18181.5 | 10.453645 | 0 | 5249 |
| GGTTCTCAGCCTGAGCCGCC | Chip | 18192 | 21.105703 | 1.4826102 | 347 |
| TTGCTCTGAAAATTGATGCTG | Chip | 18285 | 23.095486 | 0.6942786 | 3763 |
| CTTCCCTCTGCTCCTGGTCCA | Chip | 19594.5 | 19.400415 | 1.9364738 | 1882 |
| TCTAGGTAGGCTGTGTGGAA | Chip | 20581 | 39.322697 | 0 | 733 |
| CGTCTCTGGCCCGGCCCTGGG | Chip | 21590 | 14.013508 | 0 | 3933 |
| CTGGCCTAGACAGACCCCTGATC | Chip | 24673.5 | 34.411491 | 0 | 1603 |
| CTGGAGGTGCTCGCTGGCAC | Chip | 33822 | 24.338379 | 0 | 7447 |
| GGCAATGAGCTTGACCTCCTGG | Chip | 29694 | 11.99544 | 0 | 1529 |
| CTGGCCAAGATGGTGAAACCCC | Chip | 29538 | 10.824452 | 1.9062781 | 4452 |
| CCCTTTAGCCCCCTGCAGAGACT | Chip | 39494 | 31.387457 | 0.54301858 | 895 |
| GGGGTGCAGGCCCATCTGGCT | Chip | 49070 | 17.560888 | 0 | 7628 |
| GCCCCGCGCCTGGCTCCAGGTG | Chip | 56132 | 18.496397 | 0.1512371 | 7237 |
| AGCAGCTTCACCTCCCCGCCT | Chip | 65518 | 14.003611 | 0 | 3537 |
| CTGGCCTATCATAAGCATT | Chip | 65516 | 15.111923 | 1.4583727 | 301 |
| GCAGCCTGGCAACAGAGTGAG | Chip | 2157 | 4.5432754 | 10.740927 | 2233 |
| GCTCCCCAAAAGCTCCAGGAA | Chip | 2161 | 6.0833526 | 0.0302024 | 1950 |
| GCAACTGAACATGTGTGGCC | Chip | 2167 | 6.7475801 | 0.27415401 | 1495 |
| GTTGGCACTGAAAATGGCT | Chip | 2169 | 7.5448685 | 0 | 6759 |
| CAGGCCTCTTACCCCTCT | Chip | 2175 | 4.1754398 | 3.2060738 | 1746 |
| CTCCTGGGAAAGGCTGGACACA | Chip | 2176 | 4.3887382 | 5.3727546 | 4727 |
| TAGGTGCAGTGGCTATGCC | Chip | 2177.5 | 4.5125771 | 11.198825 | 7044 |
| CCTGCGCGTCTGGTCTGTCTC | Chip | 2182 | 4.1243076 | 0 | 4302 |
| CCTGCCTATGAGACGTTTGCC | Chip | 2184 | 15.800399 | 0 | 3592 |
| TCTGCCTTCTATCTTGTCTG | Chip | 2195 | 4.2943249 | 5.856668 | 5198 |
| AGTGAGCAAGTTGATAATGGCC | Chip | 2206 | 14.006866 | 1.2831149 | 2101 |
| CCAAAGTGCTGGGATTACAGGC | Chip | 2212.5 | 5.0945106 | 7.6044312 | 4562 |
| GCGCTGCGCCTCTTCCGCA | Chip | 2221 | 4.0475416 | 8.1211281 | 5031 |
| GTGAGGCGAAGGTGCTGGCGCC | Chip | 2222 | 5.5968246 | 2.6594312 | 5511 |
| CAAAGTGCTGGGATTACAGGTG | Chip | 2224 | 4.9705548 | 11.770996 | 7510 |
| TACCACCATTGCGCTGTGAT | Chip | 2224 | 5.3224468 | 6.6427116 | 4932 |
| ACAGGCGATCCACCCGCCTCAG | Chip | 2228 | 5.9650521 | 8.9491081 | 144 |
| TCACATGTGTACAGTCCTCCC | Chip | 2233 | 4.2763724 | 1.8106569 | 1634 |

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|--------------------------|------|--------|-----------|--------------|------|
| TCCGTGGGCCCTGGCTTCGG | Chip | 2239.5 | 6.0677629 | 0 | 5469 |
| GGAGGCTCTGACCATTACCCA | Chip | 2254 | 4.1900787 | 7.1273708 | 6995 |
| TGCGGCCAGCTCCCAGGTTCG | Chip | 2256 | 5.0988479 | 6.3105674 | 2262 |
| GGTGACCTCACCTGGTCCCACC | Chip | 2256 | 9.0595703 | 0 | 2408 |
| GGCCCTTTAGACAGAGTAGG | Chip | 2246 | 8.1607409 | 0 | 3111 |
| CGCGCCGTCGGGCCAGGCC | Chip | 2247.5 | 4.7277126 | 7.7918286 | 3638 |
| CCCACTGTTCCCTGAGGCTCT | Chip | 2266 | 4.8025331 | 8.1863604 | 4776 |
| GTAGGCCATGGTGGTTGTCTCT | Chip | 2289.5 | 4.7606225 | 9.7036562 | 1606 |
| CTTCATCAGCTGGCTTACTGTT | Chip | 2296.5 | 12.356884 | 0 | 1215 |
| GCTGGGTGATTCAATTCCATAA | Chip | 2300 | 4.1779046 | 0.39830375 | 1831 |
| TCTCTTTTGAAACCGCTC | Chip | 2311.5 | 4.0555487 | 1.0858992 | 5912 |
| CCTGGGACTTGGTCTGGGTTT | Chip | 2313 | 5.9411697 | 0 | 2040 |
| TTGTGGGGCTGCCCTGTACGG | Chip | 2313.5 | 21.251358 | 0 | 391 |
| CTGGCCAGATGTTACGTCCAAT | Chip | 2339.5 | 32.041363 | 0 | 7874 |
| TACCCAGTGCCACCCTCTGAGG | Chip | 2340.5 | 4.5757027 | 6.8743863 | 6230 |
| ACCCGATGTTGGTGCTCTAGTA | Chip | 2346 | 9.0436945 | 0 | 6880 |
| CCTTGATTCCCCCGTCTCAG | Chip | 2348 | 4.8108587 | 4.7235146 | 4951 |
| CAGTTCTTCCCTCCCCCAGAGA | Chip | 2348 | 5.7050447 | 0.71364939 | 1967 |
| GGCCCTGGCAGCCACGAAAGCC | Chip | 2349 | 4.256711 | 8.8494081 | 5777 |
| GTTGAAATCTAACCCCCCTAGT | Chip | 2349 | 5.7350197 | 6.0217838 | 813 |
| GGGCTCTCCCACACGTGCCAG | Chip | 2349.5 | 4.1230264 | 5.3486781 | 6626 |
| CTGCACCCCTCAAACCTCCTGGGC | Chip | 2350.5 | 4.5978923 | 1.9378269 | 6217 |
| GGGCAAGGAAACAGCCCCCA | Chip | 2351 | 8.6663809 | 0 | 7290 |
| GTGCCACTGCACTCTAGCCTAG | Chip | 2315 | 5.0099111 | 5.8159242 | 3166 |
| ATCCCCCTGTATCTGGAAGAAT | Chip | 2318 | 5.7854853 | 3.7798862 | 765 |
| GCCCCAGCCTCCCGAGTAGCTG | Chip | 2330 | 5.0814857 | 9.9303665 | 1014 |
| CCAGTCCAGTGCCTCACATCCA | Chip | 2332.5 | 4.5615263 | 1.8066665 | 6633 |
| CTGTCCTTCCAGCCGAAATCTA | Chip | 2360 | 4.3559012 | 11.170581 | 6778 |
| AGCCCTGGTTGCAGCATTGC | Chip | 2361 | 4.9244747 | 1.5478942 | 7830 |
| CCCTGCCAGCTCCCAGCA | Chip | 2367.5 | 5.8455133 | 7.8306561 | 4757 |
| CCTAGAGCCGCACCTCCTCCAC | Chip | 2369 | 5.835712 | 4.0593348 | 6019 |
| TTCTCCAGTGCAGTAGCCAT | Chip | 2372 | 15.630626 | 0.20187679 | 918 |
| TGTCTATTCCCCCACCTCCGTT | Chip | 2379.5 | 4.5837574 | 3.2563431 | 5432 |
| AAAACCTAACGCCAGTAGCTCCC | Chip | 2386.5 | 5.209166 | 0.87618637 | 4233 |
| CAAGTGATCCTCCATCTGGC | Chip | 2388 | 5.3808784 | 7.4311776 | 5956 |
| TTTCCCTTAGCCTGAGAACATCC | Chip | 2392 | 5.359941 | 11.933125 | 6341 |
| GGCCTCGGACTTCATCGTAG | Chip | 2400 | 5.5675011 | 4.4705572 | 2727 |
| GGAGCCTCTGGCAGGGGCCA | Chip | 2402 | 4.6396155 | 6.1019282 | 1372 |
| TGGTTTAGGGAATCAATCTAT | Chip | 2404 | 7.678154 | 0.52072495 | 7421 |
| CTCCCCTAGCCCCGGAGGT | Chip | 2405.5 | 6.669796 | 0 | 4160 |
| CTCGCATGCCCTGCCTCATCCA | Chip | 2410.5 | 7.3913541 | 0.29925746 | 7114 |
| CTGTTCCCGGTGCCGGGCCAG | Chip | 2413.5 | 6.5077271 | 0.8903724 | 4981 |
| GCCTCCTGTCCCAGGCTGAGGA | Chip | 2413.5 | 9.8976374 | 0 | 2865 |
| TCCTTAAACAACCAGCTCTCA | Chip | 2428 | 5.5528088 | 7.3969135 | 3101 |
| GGGTGCTTGGCTCACGCCGT | Chip | 2429 | 4.6753616 | 12.409147 | 3678 |
| GGAGTCCAGACCAAGACTGGCC | Chip | 2430 | 4.3969355 | 2.4696999 | 6754 |
| TTCCAGCTAACTCACATCCCTT | Chip | 2439 | 7.2324972 | 0.60095483 | 1302 |
| ACGCCAGACTCCCATACTTG | Chip | 2459 | 4.50102 | 4.1521502 | 7901 |
| GAACTTGTGATCCGCCACCTT | Chip | 2483 | 4.4610376 | 7.0900927 | 304 |
| TCCTTGCTTCTGTCATTCTCC | Chip | 2483 | 5.2079062 | 6.7577206E-2 | 620 |

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|-------------------------|------|--------|-----------|------------|------|
| TTGCTTGGGCTGGAGTGCAATG | Chip | 2486 | 7.6339107 | 0 | 810 |
| GAGGGTGGTGGCTTAAGGTGCT | Chip | 2493 | 21.545008 | 0 | 6054 |
| GCCCTCATGTACAGGCTGGA | Chip | 2498 | 5.6915727 | 8.9956436 | 1447 |
| CTGCCATGCCACTGTGACTGCA | Chip | 2352.5 | 17.548986 | 0 | 7967 |
| TGCCAGCTGCTGTCCCCACA | Chip | 2506 | 12.651727 | 0 | 6621 |
| TCCTGGCAAAGATGTTGGTGT | Chip | 2509 | 5.4560823 | 0 | 5814 |
| GCCTATCTGTCAAATTCTCTG | Chip | 2514 | 9.5352669 | 0 | 2901 |
| TAAGTCCCCACTGCCACAGG | Chip | 2518.5 | 5.7638865 | 3.0076547 | 7132 |
| TCTGACTCCCATTCCACTTC | Chip | 2525 | 30.392769 | 0 | 7387 |
| TGGCGCGACGTGCCCTGCTT | Chip | 2537.5 | 5.808301 | 1.0830367 | 3855 |
| AGGCACACACATCTCCCTCCCC | Chip | 2510.5 | 5.2200365 | 3.5559428 | 3190 |
| CTTGCTACTATGCCTGGCTAAT | Chip | 2555 | 17.740189 | 0 | 1421 |
| GAAGTGTAGTCTTGAGCCCCA | Chip | 2564 | 9.4998102 | 0 | 736 |
| TGAGCTCCCTCCTGCACTACA | Chip | 2569 | 4.6559782 | 11.27425 | 3865 |
| CACCTGTAATCCCAGCACTTC | Chip | 2591 | 5.442101 | 10.425298 | 2200 |
| GAGCCCCACCCCTAGACATTCTG | Chip | 2592 | 13.910081 | 0 | 3500 |
| GCACTTACCAACTGTCCTGGTT | Chip | 2592.5 | 4.2146778 | 0 | 7216 |
| TTCAAATGATGGCAGTCCTGGC | Chip | 2601 | 6.2539949 | 0 | 7036 |
| TCACCTTGTGATCTCCCTGCCT | Chip | 2602 | 5.3760271 | 0 | 5425 |
| GGCGGTCTCAGCACCCCTTGG | Chip | 2606 | 4.6685424 | 0.3523702 | 4335 |
| TTCCAGAGAGTTATTCCCTGG | Chip | 2607.5 | 4.6125126 | 0 | 6411 |
| GCTCCCACCTAACCTTCACAT | Chip | 2577 | 9.839345 | 1.6405232 | 6215 |
| CATTCTCAGTATCAGCCAGCCC | Chip | 2579 | 12.640401 | 1.6748168 | 928 |
| TGTGCCTGTTCCCACTTGCCT | Chip | 2611 | 5.0901771 | 2.5660698 | 6728 |
| TGGTTGATGTGTCTGTTTAGG | Chip | 2612 | 4.3839817 | 0.81509507 | 2253 |
| GACCTTGTGATCCACCTGTTT | Chip | 2612 | 4.8775668 | 12.335071 | 200 |
| GGAGTTACGATGTTGGCCAGG | Chip | 2615 | 7.6359258 | 0 | 400 |
| TCCTGCCTGGGGCCGCTG | Chip | 2616 | 4.7310023 | 10.146957 | 7875 |
| GACTCGCTCCCTTTGTCTTAT | Chip | 2618 | 4.8540587 | 8.7134781 | 2385 |
| GTGCTGGATGAAATACTGGAA | Chip | 2618 | 31.031715 | 0 | 3788 |
| CCCTGGCAGTGCTCCTTAGAC | Chip | 2622 | 5.4874659 | 0 | 7899 |
| CTTCCCACCATCTCTG | Chip | 2625 | 4.8619056 | 7.170155 | 5583 |
| CTCTGTGGTGGAGTGGTCACC | Chip | 2634 | 6.3390269 | 1.0710925 | 1766 |
| GGTCCCCCATGGTGAGCACTG | Chip | 2640 | 12.263632 | 0 | 4591 |
| TAGATTCCATTGGCCCAGAGAA | Chip | 2642.5 | 5.9990945 | 6.5212164 | 1442 |
| TCCACCAAGCCGGGCCACTTC | Chip | 2648.5 | 4.7161036 | 4.8864894 | 5549 |
| TGTGAGACTTCTTGGCCTCT | Chip | 2660 | 7.0328341 | 0.18635188 | 1682 |
| CTTCCTTCTCACTAGCAGCGCC | Chip | 2665 | 5.1787534 | 2.627044 | 618 |
| TTGTCCGTGGTGAGTCGCATT | Chip | 2678 | 5.3224468 | 5.8358331 | 478 |
| GGGCACCTCTCTGGTCCAGCCC | Chip | 2685 | 8.6773491 | 0 | 6613 |
| GCTAGTGCAGGGAAATCTTGG | Chip | 2688 | 26.986755 | 0 | 831 |
| CTGCACTGACTCCCCGGCTGC | Chip | 2702 | 4.0437126 | 7.0977674 | 7251 |
| TCGCCAGCTCATCTCCACAA | Chip | 2703.5 | 5.3652906 | 1.3689227 | 7726 |
| TCCACAAAGGCAGCTCCTCCAGG | Chip | 2706 | 5.4716368 | 1.7482823 | 7085 |
| GCCTGGACTGTTTACCATTT | Chip | 2709.5 | 4.8429475 | 1.7205493 | 4566 |
| CAGAGCCCCTCGTCTCCACCA | Chip | 2694 | 7.5265632 | 0.54361749 | 4103 |
| GCCCTGGCAAGGTTCTGGCCA | Chip | 2714 | 5.1504555 | 0 | 7739 |
| TGAGTGACCAGAAGTCCCCCTC | Chip | 2715 | 6.7934761 | 1.1538888 | 2414 |
| GCCCTGCCCTCTGGCACTCGC | Chip | 2717 | 5.5086098 | 11.520112 | 4992 |
| CCATCACCCCTAACTAGTG | Chip | 2735.5 | 18.076384 | 0 | 7143 |

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|--------------------------|------|--------|-----------|------------|------|
| CATTCCCTGGCCCCGGCGCCGTC | Chip | 2736 | 4.0554576 | 10.724096 | 3142 |
| TCCCAATAGCCTAAGAGCCTGG | Chip | 2742.5 | 4.4703951 | 1.2259418 | 5247 |
| CTTCTCGGGGTTCCCGCGCCCT | Chip | 2766.5 | 4.3488479 | 3.1100295 | 1891 |
| CTCTGAGTCCTGCACTCACCCG | Chip | 2770 | 6.7869315 | 1.284364 | 192 |
| ATCCTAGAACATCAGCCCTTGCTG | Chip | 2772 | 8.6334085 | 0 | 7706 |
| GTGCCAGCAGCAGCGTCCCCG | Chip | 2773 | 10.263255 | 0 | 3699 |
| CCTCTTCAGGCACTCGAAGGCC | Chip | 2775.5 | 13.966924 | 0 | 7966 |
| TATGTTGGCCTGGCAATTCA | Chip | 2780 | 4.5881057 | 9.7094517 | 6931 |
| GCTCATGACTGTAATCCCAGCA | Chip | 2783.5 | 6.7136006 | 1.7869294 | 4367 |
| GAGCCCAGGAGTTGATGCTGC | Chip | 2802 | 4.1153555 | 12.440318 | 2704 |
| CTGTAATCCCAGCTACTCGGGA | Chip | 2806 | 5.0527177 | 16.432554 | 4237 |
| ACTCTTCTGCCAACAGG | Chip | 2806 | 5.5159893 | 5.3098421 | 8068 |
| TGGCTATTCTTGACACA | Chip | 2806 | 18.175655 | 0 | 1944 |
| TCCTGGGATCAAGTGATCCTCC | Chip | 2812 | 5.5412574 | 0 | 7259 |
| TGTCTCGTCCGCCCTCGAACTC | Chip | 2812.5 | 5.7277908 | 0 | 2138 |
| CCCAGCTTCAAGTCACCCCC | Chip | 2752.5 | 5.4642267 | 3.5884585 | 6799 |
| CAAGGGTTGCATTGGCTTT | Chip | 2817.5 | 4.1292181 | 6.8459005 | 8100 |
| GTGTCCCCACCCAAATCTCATC | Chip | 2826 | 5.9052849 | 6.1014419 | 6949 |
| GAGTGTCCAGAAACTGGCCCT | Chip | 2828 | 8.6828289 | 0 | 3379 |
| GCAAGTGTCTGCCCCCTT | Chip | 2829.5 | 5.2069716 | 4.7231493 | 538 |
| CTCGCCCCGGCACAGTGTCCGT | Chip | 2832 | 13.572888 | 0 | 3693 |
| CTTCCTCCTCCATCTGAAGGC | Chip | 2834 | 4.6479778 | 8.16576 | 5745 |
| CTGCAGCCTCCACTTCTGGGC | Chip | 2839 | 4.7054248 | 13.918253 | 81 |
| TGTCCCCACCCAAATCTCATCT | Chip | 2845.5 | 11.856786 | 0.60507727 | 2781 |
| GGCCGCGGATTTCCCGCTGGC | Chip | 2846 | 7.2294455 | 0 | 1025 |
| TGTGACTGGTTGTCGGCTTTC | Chip | 2849 | 5.792357 | 8.2097464 | 5038 |
| TCAGGCACCTCCTCTTATCTG | Chip | 2858 | 4.891077 | 9.5462265 | 1434 |
| AGGTGGCGCTGCTCCGCTGG | Chip | 2858 | 7.4741468 | 0 | 3056 |
| CCTTCCCACCCACCC | Chip | 2859.5 | 5.3813839 | 6.5249782 | 1370 |
| AAAACAGCTTCCTCCAGTGGCTC | Chip | 2883 | 4.3991041 | 8.6778612 | 6467 |
| TCAGTGACTCCTCTTCTGCT | Chip | 2889 | 24.387354 | 0 | 5787 |
| AGGTGCTGGCTCGTCACACA | Chip | 2892 | 14.372602 | 1.3857702 | 1289 |
| GCAGGCATTAGCCCCCATGGCT | Chip | 2898 | 5.2414117 | 11.64039 | 5129 |
| GGTGGTTCACGCCTATAATCCC | Chip | 2909.5 | 4.9835281 | 4.240087 | 2422 |
| AGCCTGGGCAACAGAGCAAAAC | Chip | 2910 | 8.8808632 | 0 | 504 |
| GGGGCATTGTGTCGGGTTCT | Chip | 2912 | 5.6041431 | 2.0277293 | 6304 |
| GGCTTTGTTCAGCTCTGCTA | Chip | 2914.5 | 4.8676863 | 0 | 5006 |
| GGGTTGGATCCTGGTGGCTGCC | Chip | 2919 | 7.9534206 | 0 | 7011 |
| TGATGTGGCCCCACTTAGCTGT | Chip | 2921.5 | 20.029945 | 0 | 3804 |
| AAGGTTCCCTCTCCACCCAGC | Chip | 2925 | 4.0868788 | 6.821908 | 4726 |
| TTTCTCCTCATGACTGGTTGT | Chip | 2943 | 4.1956687 | 3.8969367 | 706 |
| CTCCAGTCTCTCATGTATCCC | Chip | 2943.5 | 5.1170878 | 6.0549593 | 3516 |
| TCACCTTGTATCCGCCACCT | Chip | 2944 | 5.2524996 | 4.4200244 | 5877 |
| TGGGTAGTTCCCCCTGCCCTGC | Chip | 2944.5 | 4.1729741 | 10.251331 | 6458 |
| CATCTCTGGCTTGGATTATGGT | Chip | 2875.5 | 4.1804218 | 9.7742558 | 4189 |
| CGAGGCCTCCTCGCCGCCACCG | Chip | 2917 | 5.8924813 | 0 | 5792 |
| GTGGTGGTTGAGCTGCCAGGG | Chip | 2963 | 4.502933 | 8.8193016 | 7636 |
| CCTGGGAGGCTGAGGCTGCAGT | Chip | 2965.5 | 4.9182892 | 9.9978838 | 8120 |
| TCCTTCTCCCTCATCTT | Chip | 2966 | 4.4738102 | 11.3113 | 5840 |
| AACCACCATTCTCCTCTTCC | Chip | 2979 | 5.3795991 | 1.3000224 | 4718 |

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|-------------------------|------|--------|-----------|--------------|------|
| GGTTTTATCCTACCCACACAGC | Chip | 2980.5 | 10.801926 | 0.75884527 | 573 |
| CCACGCATCCCTCCACAGAGAG | Chip | 2981 | 4.6559062 | 10.40073 | 5457 |
| GGGCTAGCCTCTCCCTGCTCC | Chip | 2982 | 4.0539145 | 1.5543098 | 4300 |
| AGTGGTCTTAGCTTGCTGGGCT | Chip | 2958 | 11.094181 | 1.2701284 | 1540 |
| CAGCCCCCCCTGAACCTTCGGG | Chip | 2994 | 5.1533017 | 10.540549 | 5742 |
| CCGTGGTCACCTGAGCTCCTG | Chip | 2997 | 11.129673 | 0 | 1964 |
| GCCGACTGCCTTGTGAGCCT | Chip | 3002 | 4.743588 | 4.5328951 | 6657 |
| AGCTGGGGCTGTGGTTGTGATT | Chip | 3007 | 5.3449593 | 10.225232 | 3548 |
| AGTGGGCCGGACAGCCCAGGCC | Chip | 3009 | 11.111638 | 0 | 2938 |
| TCTGCACCCCAGCCTGAGTGA | Chip | 3009.5 | 5.033093 | 10.499595 | 5332 |
| CCGGCTACTCGGGAGGCTGACG | Chip | 3014 | 4.2986312 | 12.683091 | 6445 |
| GGCCGTCAGCCCCGATTGCCA | Chip | 3015.5 | 4.7711444 | 4.6092601 | 2815 |
| TTTTCTCTCCCTCTGGACCTG | Chip | 3026 | 4.9174376 | 7.1403542 | 3348 |
| GTGTTGTCGCTGGGTTTGAGGG | Chip | 3030 | 4.5279474 | 3.9595523 | 223 |
| CTTTAATTGTAGCTCCCATAAT | Chip | 3034.5 | 4.9478436 | 10.275362 | 7678 |
| GAAAGGAGAGGGTTAAGGAGCT | Chip | 3036 | 5.146657 | 0.26237148 | 7283 |
| TGTGTACTTCCCCCTGACCTGT | Chip | 3073 | 11.584995 | 0 | 3547 |
| GGCTCTGTGTCTCCACCCAAAT | Chip | 3079 | 5.4224949 | 9.948535 | 7310 |
| TCCCCAGCTTGCTACTTCTGCT | Chip | 3083 | 5.0408092 | 4.8841767 | 1879 |
| CCCGTTGCCTCTGGGAGTTGT | Chip | 3085 | 4.8488579 | 1.4175067 | 7582 |
| GCACTTGCCTCCTTTGGCA | Chip | 3096 | 5.8571658 | 1.1003072 | 6597 |
| TTGCATCTCTGGTTGAGCCCC | Chip | 3115.5 | 4.8583755 | 5.3206172 | 6896 |
| TTTGCCTTTCTGAGCCTCATC | Chip | 3116 | 5.2478795 | 0 | 5621 |
| TCCATGCACATAGCCCCC | Chip | 3033.5 | 9.5907459 | 4.2999502E-2 | 6484 |
| GATAATCCACTCTGCTGACTTT | Chip | 3054 | 4.3317614 | 6.3779197 | 6973 |
| CAAGTGAATGCTCTCCTCCC | Chip | 3123.5 | 4.0142264 | 6.7150235 | 5987 |
| TGTCCTCATCCTCCAGTCTGTC | Chip | 3129 | 5.6114564 | 1.2281151 | 5991 |
| GGCCTGGGCTCCGGGAGTTACT | Chip | 3130.5 | 9.2845545 | 0 | 3568 |
| CCCATTCATCCTCGCTTCCTTC | Chip | 3138 | 7.3333998 | 0 | 3213 |
| GGCCTGTAATCCCAGCTACTCA | Chip | 3140.5 | 5.8857031 | 12.328485 | 3216 |
| ACTGTACTCCAGCCTCGGTGAC | Chip | 3141 | 5.0527177 | 14.756032 | 6962 |
| ATCCTCCATCTCCATCGGACTG | Chip | 3145 | 12.66304 | 0 | 5497 |
| TCCCCAAGCAGGCAATCTCCCG | Chip | 3149 | 4.4257097 | 6.5767608 | 1310 |
| TAGGAGGATTGCTTGCCAG | Chip | 3154.5 | 4.6519237 | 4.9273152 | 351 |
| CACCACTTCTCCTTCTCCTTGG | Chip | 3132 | 5.2580366 | 8.4857149 | 5311 |
| GGCCTGTTGCGCTATTTCAG | Chip | 3159 | 4.7927871 | 10.763789 | 4423 |
| TATGTCACTCGGCTCGGCCAC | Chip | 3182.5 | 4.1082759 | 11.183109 | 3307 |
| TGATTTCAGGCCAGGGGGCGTT | Chip | 3186 | 4.1073384 | 9.1334038 | 472 |
| CACCTTGGCCTGCTATTCTC | Chip | 3186 | 12.872056 | 0 | 1713 |
| ACTGTACTCCAGCCTGGCGAC | Chip | 3187 | 4.4324884 | 14.526779 | 3509 |
| GGCCTGGCAGAGCGCGCGGCTG | Chip | 3187 | 5.3775048 | 0.47298598 | 5434 |
| AATTTCGGTTCAAGGCCAGTT | Chip | 3187 | 9.0648565 | 0 | 461 |
| CTGGTTATCTCGGCCACAGAGA | Chip | 3187.5 | 12.082075 | 0 | 634 |
| CATGCCCTGGGGCTCTGCCCT | Chip | 3189 | 5.6406593 | 7.8016257 | 1335 |
| CTCTGGACCCCTCCTGCTGAGAG | Chip | 3192 | 5.8815751 | 12.393508 | 4016 |
| CCCAGGCCCTGGCAGAGCTTGT | Chip | 3205 | 4.2292862 | 11.181579 | 7968 |
| CAGCTGTTCATTGTTGCCACCC | Chip | 3205.5 | 7.6901884 | 0 | 2792 |
| GTCCCCGACGTTGGCTTGATG | Chip | 3207 | 4.4545999 | 5.6476693 | 7250 |
| AGCGACACCGCCTGCAGGCCAT | Chip | 3210 | 20.239182 | 1.8362232 | 4601 |
| CCAGAAAAATCCTCCCTGTCC | Chip | 3211.5 | 5.2451043 | 8.3984203 | 7788 |

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|-------------------------|------|--------|-----------|------------|------|
| TCTCTTTCTGGAAGCTCCCT | Chip | 3219 | 6.8929572 | 1.1474941 | 4446 |
| TATTTGTCTGGTCTAAGGAGGG | Chip | 3219.5 | 4.6818242 | 11.217502 | 3297 |
| GGGTAAATCTCTTTCATGGCT | Chip | 3221 | 4.827455 | 8.7138081 | 6777 |
| ATCCTCCAGCTCCTGCTTCTGC | Chip | 3174 | 4.2183352 | 2.8458629 | 5818 |
| GAACCTGGCCTGTCTGTCTGGC | Chip | 3174 | 11.941829 | 0 | 4608 |
| TCGCGGGTTGCACATGGCCATC | Chip | 3200 | 5.0210557 | 12.488149 | 6528 |
| CAGCCTGGTCCCCGGCTCACCC | Chip | 3234 | 4.2474666 | 6.4346752 | 3021 |
| GCCCTCTGGCAGGCAGTGATG | Chip | 3239.5 | 4.6479778 | 8.1225739 | 8084 |
| CGCCCCCAGGGCCTCGAGCATG | Chip | 3255 | 4.2474666 | 5.3765326 | 1696 |
| ACTTCCCACCCCTCCAG | Chip | 3259.5 | 4.1611338 | 12.380153 | 2536 |
| GTCTGTTTCTCTGTGGGA | Chip | 3260 | 4.4957891 | 12.91537 | 3583 |
| CCTCAGACCCCTGCTGAGCTTC | Chip | 3264 | 5.0253716 | 2.4009373 | 1027 |
| GAGGCCTGGCAAGGGGGTCTG | Chip | 3266 | 5.8565254 | 9.1992407 | 7785 |
| CTGGCCTGGCGCAGTGGCTCAC | Chip | 3273.5 | 6.038754 | 0 | 2931 |
| AGCTACCTGATCCTTCTGA | Chip | 3226 | 4.1367669 | 12.153009 | 2463 |
| GCTGGCTGACAGATTGGGTG | Chip | 3232 | 9.7306767 | 0 | 4258 |
| CGTGCCTCAGCCTCGTGC | Chip | 3284 | 4.5142207 | 12.660418 | 4492 |
| TGCGCCATGTGCTCGGCCCT | Chip | 3290 | 5.4790416 | 8.9091539 | 4306 |
| GTCTCGTCAATGGCAGGTTCCC | Chip | 3293 | 7.1220169 | 0.86746806 | 3529 |
| AGTTGGCACTGAGCTGTGATTG | Chip | 3303 | 5.8162518 | 0 | 1297 |
| CCTGGCTCCTACGGGTATTTG | Chip | 3308 | 4.5325184 | 0.97975397 | 2823 |
| CTGTAACTGTCCCTTTGCC | Chip | 3318 | 4.9795561 | 11.643893 | 7169 |
| GCGTCGGGCCTCTCGCTCCCG | Chip | 3319 | 5.4790416 | 5.205163 | 3184 |
| TAGCCCCCTGCCTTGAACCTGG | Chip | 3340 | 5.771091 | 7.2742958 | 6254 |
| GAGGCCACTGTCCCTGCCTTCC | Chip | 3343.5 | 4.653738 | 9.7698135 | 651 |
| GCCTGTGTCTGGTGGCCAGAG | Chip | 3356 | 10.371323 | 1.1448419 | 2135 |
| CTCTGGAGTGTCTGGCCAGGGT | Chip | 3361.5 | 4.2338123 | 13.302693 | 4324 |
| CTGTCCCTGCCAGTCCTGGACTC | Chip | 3377 | 5.8142152 | 7.2265315 | 2025 |
| CCAGCCCCAATCCCTGGCCAGG | Chip | 3382 | 13.906728 | 1.8086184 | 2377 |
| TCCTCCCCAAAGGCCAGCCTGG | Chip | 3388 | 4.4911599 | 5.001718 | 8130 |
| TATCTCCTGTCAGGGTGGTGGT | Chip | 3391 | 4.372324 | 7.0112314 | 4868 |
| CCGGAGTGTCTGGCCTGCTGGG | Chip | 3411 | 4.093287 | 9.0740547 | 2286 |
| TGGAGGCGAGAGCGCGCGGGCT | Chip | 3411 | 4.1435757 | 0.4630875 | 6290 |
| CTCCCGGCTGCTCCGGCTCCG | Chip | 3404.5 | 4.0221744 | 10.150807 | 6688 |
| GGCCTACGCCAGTATCCCCAGG | Chip | 3426 | 5.7392426 | 7.2661905 | 6501 |
| TCTGCCCGAGCCGACTG | Chip | 3479 | 5.2319188 | 7.0148258 | 4658 |
| GGCCGGGGCCTGCTCGCCTGTG | Chip | 3488 | 15.259133 | 0 | 7115 |
| ACCTGAGCTCCACCTCCTGCC | Chip | 3490.5 | 5.5675011 | 2.1058514 | 3555 |
| AGTTGTTCGTGGATTCGCT | Chip | 3494 | 4.0696526 | 11.844742 | 1454 |
| CATTAGGACGCCCGCCCATAC | Chip | 3517 | 4.7521834 | 7.6331592 | 2421 |
| ACCTCCTGGCGGGCATCCTC | Chip | 3524 | 4.3451629 | 9.1596689 | 3726 |
| AAATGCAACGGGCTTCCTTAT | Chip | 3531 | 4.3887382 | 1.0790982 | 4387 |
| TCCTTCACTCCCTGCACTCCA | Chip | 3533.5 | 5.2938275 | 8.4558067 | 4029 |
| GTGTGTCTCCAAGAAGGCCA | Chip | 3536 | 4.6024246 | 8.0168934 | 5835 |
| TCTTGCTATTGTGAGTAGTGC | Chip | 3427 | 17.426813 | 0 | 3473 |
| ATCTGGCTCCCTTGGAATCCGT | Chip | 3434 | 4.1733551 | 9.8152704 | 7284 |
| GGGCCACCCCCACTGCCACGCT | Chip | 3459 | 4.6319594 | 4.3550696 | 1045 |
| AGACAGGGTGATCGCTTGAGCC | Chip | 3466 | 4.6497626 | 7.744925 | 6097 |
| TGTCCCTCTTGTCTGCCAAA | Chip | 3592.5 | 5.1910453 | 1.0036907 | 3898 |
| TTTACCTTGTGGGTCTCCCTC | Chip | 3593 | 4.5381126 | 8.0754824 | 4192 |

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|-------------------------|------|--------|-----------|--------------|------|
| GGTCTTTCTGCTGCAGGTTGT | Chip | 3605 | 4.629807 | 6.2433772 | 2148 |
| TCCCGTAGGTTGCTGTAGTCGG | Chip | 3606 | 5.655231 | 9.4085045 | 1573 |
| GCTTTATCCGCTTGACCCTTAC | Chip | 3616 | 4.4118524 | 13.271925 | 7725 |
| GGTGAATTGCCTCCGACTGA | Chip | 3632.5 | 5.797946 | 13.529587 | 3677 |
| GACCCTCTAGATGGAAGCACTG | Chip | 3638 | 4.4202566 | 13.507792 | 7870 |
| GTCCACTTCTGCCTTCTGGAT | Chip | 3648.5 | 4.579267 | 11.366967 | 5768 |
| ACATCCTCCGATCTACTGGCT | Chip | 3651 | 8.4286737 | 1.3539879 | 1143 |
| CCTTCTCAGCCCCAGCTCCCGC | Chip | 3674 | 6.5766706 | 0.30380982 | 4589 |
| TTCTTTCTGAGCCTG | Chip | 3674.5 | 5.9793639 | 0 | 7439 |
| CTTCCCCAGGCTGGTCTGTAT | Chip | 3686 | 8.8317556 | 0 | 4502 |
| GACCACCTGGCCAACGTGGTA | Chip | 3690 | 4.9752827 | 15.844102 | 6829 |
| TCTTCCTGTCAATGAGAATTAA | Chip | 3699 | 5.0892124 | 3.8346827 | 5062 |
| GTCCTTCCACATGGCCAACCTC | Chip | 3716 | 4.1157985 | 8.4863319 | 5355 |
| TGGGGGACACCAGTCTCTCT | Chip | 3739 | 10.531529 | 0 | 857 |
| TGGTCTTGTCCCTCCTTGATC | Chip | 3743 | 4.6968236 | 2.9960811 | 6915 |
| CCTGCCTACTGAGTTTATATT | Chip | 3745 | 12.760594 | 4.7314309E-2 | 4869 |
| GCATGGCTCGGGGTGCTGCCT | Chip | 3747 | 5.1863647 | 12.211168 | 6780 |
| CCTCTGTGTCTCCAAGAGGCCT | Chip | 3752 | 9.7851496 | 0.61701149 | 1989 |
| ACGGTGCAGCCTGTCCCTTCTC | Chip | 3755 | 9.4693241 | 0 | 2642 |
| CTGGCCTCGGCAGCAGGAACAG | Chip | 3757 | 4.0009317 | 4.5684352 | 3426 |
| ATGAGCACACTGATAAGCCCCT | Chip | 3757 | 15.382463 | 0 | 1559 |
| CGGGGTTCATCCATGCTGTGGC | Chip | 3762 | 4.0037775 | 5.9347458 | 2747 |
| AAGTCTCTCACATATCTGGTCC | Chip | 3668 | 4.6719613 | 6.1481905 | 2273 |
| TCCCTGTGTCCCTGGGGCACCT | Chip | 3722 | 5.5684233 | 0.76068252 | 1608 |
| GGGTTCAGTCCCTCTTGCTACT | Chip | 3765.5 | 4.6101117 | 4.239377 | 4801 |
| TTCCAGTTCTGGGCTGGCTGCT | Chip | 3769.5 | 4.0091105 | 3.8919213 | 7920 |
| GCCTGCTCCCAGTTGGCGCCTC | Chip | 3775 | 10.338549 | 0 | 3941 |
| AGGCTCCCTGAATGCCCGGTT | Chip | 3782.5 | 10.510651 | 0 | 6739 |
| GATATCATTGAGCCCCAGGAGTT | Chip | 3794 | 5.4940314 | 13.768772 | 4179 |
| ATCTCCTGGTCCACCCGGGCGG | Chip | 3796 | 4.0230289 | 5.5431991 | 7256 |
| GCTGCTCTCCAAGCCTCCTGA | Chip | 3797.5 | 5.4047599 | 5.8530407 | 4369 |
| CTGAGATAGGACTCTGCTGGCT | Chip | 3797.5 | 11.873036 | 0 | 7046 |
| AGCAGCAGTATCCTCCCCGGC | Chip | 3825 | 4.4749479 | 9.2136803 | 4885 |
| GCCATCCTGATGACAGGCCACT | Chip | 3787 | 18.20257 | 0 | 2225 |
| CAAATCCCTGCTCTGTGCTG | Chip | 3854 | 4.0554743 | 15.468264 | 1635 |
| TCTGCACCATCGTATGCTTAAT | Chip | 3861 | 4.0593572 | 6.2677927 | 446 |
| TCACCCCTCCATTCTCTCATGT | Chip | 3872 | 5.0523677 | 5.8481488 | 1641 |
| GCCTGTATTCCCAGCACTTGG | Chip | 3873 | 7.0698829 | 0 | 4334 |
| TATGCCACTGCTCTCCATCCTA | Chip | 3874.5 | 14.223907 | 1.1388568 | 1853 |
| ACCAGGTTGGTGTCCCTCTGGC | Chip | 3867 | 4.9248667 | 11.592688 | 2157 |
| GGGGGGCGCCATGGTCTCTGG | Chip | 3867.5 | 5.3418927 | 0 | 3950 |
| CTCCTGAATTGTCCCTCACAGC | Chip | 3894 | 7.9632921 | 0 | 7500 |
| GCAGCTATTGTCTCCTGGGCC | Chip | 3900 | 4.0808616 | 12.07268 | 2303 |
| GCGCCCCATCTACAGTACTTT | Chip | 3901 | 7.4468746 | 1.8634913 | 5194 |
| AGATTG GTGTCTGGTTGATAT | Chip | 3906 | 5.6260681 | 15.079812 | 1730 |
| ACTGTACTCCAGCCTGGGGAC | Chip | 3910 | 5.224843 | 16.213413 | 1355 |
| CTGGCCACTGCACCTCTTCCCT | Chip | 3912 | 5.3084121 | 3.5621116 | 4873 |
| GTCCCCTGTCCAGGGCCAGCCA | Chip | 3915.5 | 14.246669 | 0 | 1569 |
| TGGGTGACAGAGCAAGACTCTG | Chip | 3917.5 | 4.9988604 | 13.126308 | 2656 |
| GGCCCTGGTCTAGGGGTGGAA | Chip | 3918 | 29.682575 | 0 | 5938 |

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|-------------------------|------|--------|-----------|------------|------|
| GCCCCACGGCCCTGCTCTGC | Chip | 3930 | 15.931521 | 0.13763157 | 1367 |
| GCTTGGCTTACTAGGGGGACA | Chip | 3943.5 | 4.974093 | 8.3365431 | 6132 |
| GCACCGCCCTGGACCGCCCGCT | Chip | 3964 | 4.1457386 | 10.605991 | 5467 |
| CCCTGGCTGCGTGATGGATGAA | Chip | 3966 | 4.1167688 | 10.868774 | 1605 |
| TTCCTGGTCTATTAGAATTGC | Chip | 3974 | 4.2977972 | 7.7437348 | 5885 |
| TCTGTGTCTCCACCCAAATCTCA | Chip | 3991.5 | 9.2170362 | 0 | 7276 |
| CCTGTGCTTGGCCAGAGAGGTT | Chip | 3994 | 4.3371038 | 14.052099 | 7232 |
| CGGTGGGTGCTTCAGGCAGGTGG | Chip | 3999 | 5.0099111 | 5.715847 | 323 |
| TCTCAACAGTGCAAGCTGCTCC | Chip | 4000 | 46.689823 | 0 | 4078 |
| GGTCGCTGTGTAGGTTCAGCTA | Chip | 3938.5 | 5.7133183 | 2.4790351 | 5080 |
| TCTAGCTCTGCTTATCATGGCT | Chip | 4019.5 | 17.300783 | 1.1704206 | 5341 |
| CCCAGCAGTAGAGCTCATATGG | Chip | 4022 | 30.281006 | 0 | 4712 |
| GGGTCGCTGCCGCTGCTGGACC | Chip | 4024 | 4.6667271 | 8.2883673 | 6043 |
| GTGACTGTGGGTTCTGGTTCC | Chip | 4025.5 | 5.8571658 | 7.4026732 | 220 |
| AGCGGGGTGTTTGGGTGGCCT | Chip | 4033.5 | 10.082271 | 0.52406603 | 6110 |
| TGGTCCCCATCCTTGCATT | Chip | 4035.5 | 4.9446163 | 6.7577944 | 860 |
| GGCTGACTTTATGCACACTAA | Chip | 4041 | 4.1568542 | 15.429013 | 785 |
| GGTCTGTCTTCCCAATCGTGGC | Chip | 4046.5 | 4.2799697 | 6.4598308 | 3953 |
| GCCGTCCACCTCGATGGCCACT | Chip | 4073 | 13.174488 | 0 | 3814 |
| GCTGCTGGGCCATTGTTGG | Chip | 4101 | 7.7621112 | 1.3319389 | 210 |
| ACATGATTGTCTGGCTTGGCCA | Chip | 4115 | 10.389771 | 0 | 5748 |
| TGGCTGTACATTGGAATTATCT | Chip | 4116 | 4.8355722 | 0.55707508 | 4491 |
| CCCTGCATCCAAAGGCCCTCC | Chip | 4119.5 | 16.061049 | 0 | 5763 |
| TCCCCCACTGTTCTGCTAC | Chip | 4143.5 | 5.7292447 | 1.3394566 | 5286 |
| TTGTTCTTGTCTTGCCTTCAC | Chip | 4146 | 5.8114853 | 5.746397 | 2352 |
| CACCATGCCTGGCTAATTTTT | Chip | 4149 | 5.579587 | 14.67128 | 7848 |
| TCTTCACGCCAAGTGCCCCCTCA | Chip | 4150 | 25.789295 | 0 | 6331 |
| TCAGGTGCCTGGCTAATTGTT | Chip | 4158 | 4.3205009 | 12.139079 | 5543 |
| GTCTCCCCAGGGCCCTTCAT | Chip | 4158 | 6.3563652 | 1.3304862 | 612 |
| AAATGTGGGGCTGGAGGGAGGA | Chip | 4164 | 4.2210102 | 16.645317 | 5915 |
| CTGTCCGCCGACTTGGCCAGGC | Chip | 4178 | 4.2281923 | 12.589372 | 7787 |
| TTTCTTCCCTGCTTGTCCCATG | Chip | 4054 | 5.4825935 | 11.238956 | 6925 |
| CCTTCCCAGTCAGCCTGTCTGA | Chip | 4066 | 5.3572183 | 6.7426419 | 5204 |
| TCCTGGCTTGTACATCTACGT | Chip | 4198 | 4.4526401 | 3.8407443 | 1933 |
| CAGTGCCCGCCGCCGTTCTGG | Chip | 4235 | 4.8511839 | 14.764318 | 492 |
| ACTCTGGCCATCTTGGACCTTG | Chip | 4235 | 5.8999434 | 14.697995 | 6715 |
| CTTTTCCCCCTTGGACTC | Chip | 4238.5 | 5.1553736 | 7.0349116 | 1263 |
| TGGTTGTGCACGGGTTGGT | Chip | 4287 | 5.809895 | 12.026738 | 3732 |
| ATCTTGCCAGTCTCCAAATCAA | Chip | 4293 | 4.7687039 | 16.254972 | 7548 |
| GTTACTCCTGGTTGAGCTTGGT | Chip | 4309.5 | 4.4103327 | 15.300289 | 6691 |
| TTGCTGACCTTGCTCTCCGTT | Chip | 4311 | 5.1390486 | 6.5618801 | 1783 |
| TGAGTCAGCCTGGCAGCCCC | Chip | 4321 | 10.234882 | 0 | 2705 |
| CTCTGCAAGTCCAGCCCCCTGGC | Chip | 4339 | 8.3685989 | 0 | 1681 |
| CAGAGCTGGTGTGCTCTGGCAT | Chip | 4347 | 8.8573503 | 0.72330654 | 3372 |
| CATTCTAGGCCTGGCTGGGCC | Chip | 4350 | 4.7693954 | 0 | 490 |
| CTCCTCCACCCGCTGGGGCCCA | Chip | 4352 | 8.1910143 | 0 | 1458 |
| ATGGGCTGTCCATTGCTGGCTG | Chip | 4362 | 18.782331 | 0 | 3864 |
| CTTGGAACACCCAGCTCTGTG | Chip | 4367 | 4.3228598 | 8.8246651 | 2644 |
| GTGGCCAACCTGGCCCTGAAC | Chip | 4379 | 20.084518 | 0 | 3296 |
| AGCCCCAAACACCAGGATTACT | Chip | 4319 | 8.0879526 | 1.9557818 | 6320 |

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|-------------------------|------|--------|-----------|------------|------|
| TTCCCTTAAATTATGGCATCTA | Chip | 4395 | 10.634765 | 0 | 7450 |
| GCAGGCTCTGGCTTATTCTGGG | Chip | 4399 | 4.4706116 | 13.904231 | 202 |
| TGTCCGTGGCCTCTGGAT | Chip | 4401 | 5.2269702 | 12.950581 | 7068 |
| AAAGTGCTTCCTTTGAGGGT | Chip | 4403.5 | 4.8706794 | 7.6543956 | 2362 |
| CGGTCTCCGTGTGTGCGCT | Chip | 4407 | 5.3256574 | 16.37768 | 6107 |
| CTCAGCTGGCCTGGACGTAGC | Chip | 4410 | 4.8741584 | 14.490013 | 2833 |
| CGTGACTGGTCCGTCTGGCT | Chip | 4430 | 5.1234531 | 8.6597939 | 7929 |
| GTGACACCCGCATGCCACTGTG | Chip | 4433 | 5.2274818 | 8.4032717 | 6151 |
| CACTAGTAGTCTCTGGC | Chip | 4435 | 21.477705 | 0 | 828 |
| AATGGTCTTCCTCCACCCCTCTG | Chip | 4451 | 4.8959856 | 5.1994057 | 1090 |
| TCCTCCAGTTCCCTGGTTTCAG | Chip | 4451.5 | 4.9735894 | 5.2467165 | 5446 |
| AGCGCCGCCCTGCTGGTGTG | Chip | 4465 | 4.3703461 | 6.2275581 | 5622 |
| TGCAATCCAGCCTGGCGACA | Chip | 4499 | 4.9212852 | 16.91279 | 3398 |
| CACTGCAGCCTCAAATTCTGG | Chip | 4509 | 5.5284224 | 3.5514677 | 2983 |
| GCCTCCAGCCCACGCAGGCCTG | Chip | 4519.5 | 13.672773 | 0 | 6694 |
| TGCCGTGGGGCTGAGGCTGGAG | Chip | 4521 | 4.5795527 | 15.352057 | 3404 |
| TGCCTCCCTGGCAAGTCTCTCC | Chip | 4529 | 4.4007978 | 9.8346052 | 5739 |
| AAGCCCTGGACGGCCCTTCCCC | Chip | 4492 | 18.769596 | 0 | 7865 |
| CCACAGTCCTGGCTTCTGTCTG | Chip | 4568 | 4.546155 | 15.062599 | 5367 |
| TGGATGGCTGTGGTCTTGCCC | Chip | 4573 | 12.492056 | 0 | 613 |
| CCTGCCCTGCTCACTGTCGGTA | Chip | 4583 | 6.1791143 | 0.75725234 | 5928 |
| GTCTGCTCGCTGCTCAGCCCTG | Chip | 4613 | 10.761443 | 1.5521971 | 7195 |
| CCGGGGTAGGCCCTGAGGCAGC | Chip | 4622.5 | 15.192184 | 0 | 2894 |
| CCTTCCCACATTCTTACATGC | Chip | 4637 | 9.2534456 | 1.1731225 | 1390 |
| TTTCTTGGGGCTCCTGCGCCAT | Chip | 4657.5 | 4.4606614 | 10.529262 | 4838 |
| ACTGTACTCCAGCCTGGGAAAC | Chip | 4692 | 5.6260824 | 17.568949 | 1466 |
| TTCTCCCTGTCCTATCAAGACT | Chip | 4699 | 4.7479568 | 12.121504 | 7455 |
| CCCAGGAGGCCTGCCTGGCCGG | Chip | 4711 | 5.0298901 | 9.8042231 | 2621 |
| GTCTCCGGCCGCCCTGGTGTG | Chip | 4732 | 5.5700078 | 0 | 1147 |
| CTGCTCTGCTGATCAGTGTCTC | Chip | 4736 | 4.4964242 | 11.948936 | 7825 |
| AGTCCTGGCCTGGGGGACC | Chip | 4747 | 5.1204491 | 11.736219 | 2749 |
| GGCGGGCAGCGTCTTGCTGGCC | Chip | 4755 | 39.514385 | 0 | 2027 |
| TGTCTGATCATGAGGCAGGGCT | Chip | 4775.5 | 5.2094531 | 0 | 5714 |
| GGGTTGGCATCAGGGTTCTGTG | Chip | 4777 | 4.5148683 | 8.4523115 | 3203 |
| TGAGGCCACCTTGGCCCCGGC | Chip | 4794 | 5.7001333 | 14.264636 | 3313 |
| ACTGCAGTCTTGATCTCCTGGC | Chip | 4871 | 4.8553619 | 1.9227443 | 6405 |
| AGAAAGTCTTCCCTTGGTA | Chip | 4890.5 | 5.1180902 | 15.543441 | 6034 |
| TTTCCCAGCCTCAGCTCAGCAG | Chip | 4894.5 | 9.402298 | 0 | 5973 |
| ACCCATGGCTGGTGGGCCCT | Chip | 4897 | 5.121223 | 1.2881944 | 3042 |
| CTGCAGTCTACCTGGATTTTA | Chip | 4922 | 4.5788498 | 17.83988 | 6870 |
| AGCCCTCGTTCTGCATCCTGT | Chip | 4923 | 15.10443 | 0.58649576 | 2329 |
| GGGAACAGCTTGGCTCTGCCA | Chip | 4814 | 4.5313773 | 3.7230809 | 1413 |
| CGGGGCCCTGGGGCTGAAGGTC | Chip | 4941 | 5.1423211 | 2.6783533 | 6642 |
| TTTGGCTTCTCCTACCAACCTCT | Chip | 4981 | 5.5610046 | 7.3423386 | 5524 |
| TAACCTCTCTGTGCCTCAGTT | Chip | 4997.5 | 5.1691394 | 10.657457 | 3012 |
| GAAGAGTGGTATCCCTGCTGT | Chip | 5008 | 5.0230203 | 10.335828 | 3106 |
| ACCCGCCGCACGTCCAGGCTGA | Chip | 5018 | 13.648748 | 0 | 659 |
| CTCTGCCTGTCTCATCCTGCAA | Chip | 5028 | 4.7158685 | 0.84503251 | 1531 |
| CGGGGCGGCTTCTGCCCT | Chip | 5038 | 5.1213508 | 7.6892729 | 336 |
| GCCTGGCCGGGTCTGGATT | Chip | 5031.5 | 5.5863533 | 7.3384004 | 3161 |

| | | | | | |
|-------------------------|------|--------|-----------|--------------|------|
| GTCTCCCAAACCTGTGATGGTCC | Chip | 5069 | 7.1779604 | 0 | 4590 |
| CTCTGCTGTGCCGCCAGGGCCT | Chip | 5084 | 6.4544711 | 0.20225658 | 3397 |
| CCCAGGTTGGCCTACAGA | Chip | 5095.5 | 4.6688876 | 17.382532 | 5559 |
| TCCCGCCCTTGTACTTGCCGAG | Chip | 5151.5 | 5.9488397 | 7.757297 | 450 |
| GTGGGGTCTGTCCTCTTCTGGG | Chip | 5161.5 | 5.2452993 | 5.3853817 | 7916 |
| CTGTCCTGTGCTTTTACTGTC | Chip | 5185 | 5.3258371 | 1.2787153 | 4865 |
| GCCCCCGAGGAGGTGATGTCGC | Chip | 5201 | 21.709009 | 0 | 1753 |
| GGATGGACGTGATGCCTAGCCA | Chip | 5225 | 25.011427 | 0 | 3501 |
| GCCGCCGCTGTGCAATTAGCA | Chip | 5108 | 5.1844678 | 11.698804 | 8065 |
| TCCCCTGGTGCCACGATCTGCT | Chip | 5256 | 16.61911 | 0 | 2287 |
| GGAAAGGCCTGGGTGTCCTGGG | Chip | 5274 | 10.099924 | 0 | 6953 |
| TCCCAGCTCCTGGGCCCCACAG | Chip | 5372.5 | 4.9255114 | 7.1915674 | 25 |
| GCGTGGCCTGGGATCCCAAG | Chip | 5321.5 | 10.117671 | 0 | 3121 |
| CGTGCTGGTCTGCGGGGCCGT | Chip | 5352 | 21.585838 | 0 | 3647 |
| TCTTCTATCCTCAGCCCCCTGCC | Chip | 5352.5 | 15.644877 | 1.239718 | 2336 |
| CCTTTTGTCCCTGCTTGGTTTCG | Chip | 5359.5 | 5.4283695 | 7.2327213 | 7016 |
| ATCTTTATCACTCCCACTGCT | Chip | 5396 | 5.4679914 | 11.567021 | 59 |
| GATGGGTTTGTGGAGAGGTC | Chip | 5425.5 | 4.8749881 | 17.533426 | 330 |
| ATGCCCTGGCCTGGGAACAT | Chip | 5475 | 5.3843775 | 17.659876 | 4459 |
| AGTCCCCCTCTGAGCCCAGGGA | Chip | 5483 | 8.0453825 | 0 | 4513 |
| CCCTCACTCCTGCCGGG | Chip | 5527 | 7.7637706 | 0 | 914 |
| GAATGTGACTGAGTGCCTT | Chip | 5542 | 24.339638 | 0 | 3342 |
| GGCCGCCGCCTGTGCTCTGC | Chip | 5552 | 20.588572 | 0 | 7524 |
| CTGGTCTGCCACCCACACCCCT | Chip | 5580 | 9.7578878 | 0 | 6416 |
| CCCTGGCTGGCTCTGCCGGAC | Chip | 5439.5 | 4.9906063 | 0.71976095 | 3658 |
| CACTCCAGATCACACCCCTGG | Chip | 5444 | 5.8463011 | 2.7913775 | 2012 |
| GGAGTGAATGGCTTGATCTG | Chip | 5693 | 9.2170362 | 1.033795 | 1248 |
| CCTCATCGTTCCAGAACATGTGG | Chip | 5732 | 14.757196 | 0 | 2111 |
| CCACCCGCTCTGCTCGGCCGC | Chip | 5736 | 5.8928256 | 9.3927116 | 1820 |
| TGGCCTGGCCGTGCTGGGGTC | Chip | 5712 | 5.5597429 | 0 | 7768 |
| GCTCTGCCAGCCCAAGGCGCAG | Chip | 5831.5 | 4.9416537 | 10.837112 | 908 |
| GTCCCCGCCGTGCTCAGGCTG | Chip | 5861 | 6.1413345 | 1.3164479 | 6557 |
| TGGTCTGTCCCACCTGCCCTT | Chip | 5877 | 5.1300492 | 7.3202324 | 3011 |
| GCTTGGCCCATTGATCAGCTGG | Chip | 5906.5 | 13.048002 | 0 | 7735 |
| GCCAAATAAGTGTCCGCCCTC | Chip | 5930 | 10.734369 | 3.6227588E-2 | 383 |
| GTGACCTGGCCGCCCTAACCCA | Chip | 5941.5 | 5.6531525 | 18.527802 | 219 |
| AGTGCCTTCAGATTGCCAG | Chip | 5977 | 12.457526 | 0.54957581 | 4700 |
| AGCCCTCTTCCAGGCCAGCACAG | Chip | 6035 | 11.725875 | 0.3822628 | 5834 |
| CGGCATGGCGTCCCCCTCACT | Chip | 6042 | 5.6168065 | 9.6102333 | 3493 |
| CACTGCACTGCAGCCTGGAGAC | Chip | 6050 | 5.6199274 | 17.140821 | 1125 |
| TTCCATTGGAGCTCGCAGCCT | Chip | 5965 | 4.9900851 | 14.792343 | 4722 |
| ACTGTAACCTCAAACCTGGG | Chip | 6067.5 | 5.62674 | 11.00416 | 3293 |
| TGGCTCTGTCCCTCAGCT | Chip | 6081 | 5.0312958 | 9.2481689 | 1873 |
| AAAGCGCTTCCCTTGGAGCGT | Chip | 6099 | 5.6389537 | 17.599831 | 708 |
| GCCTCATCGCTGCTCGGCCGG | Chip | 6124 | 5.0463729 | 9.853282 | 1947 |
| CCGAGGTCCCTGGACTTGGCCCT | Chip | 6198 | 17.494062 | 0 | 7162 |
| ACCACCCAGCCAGCTTCCCT | Chip | 6121 | 10.716282 | 0 | 6366 |
| CATCCCTGTCGTCAAGTCTG | Chip | 6284 | 5.5781989 | 0 | 4263 |
| AAGACACCAGAGACTGGCCTCA | Chip | 6306 | 5.8909965 | 5.1631103 | 142 |
| TTGTGGAACTCATCTGCCCTGGT | Chip | 6341.5 | 5.7602396 | 6.9522476 | 2681 |

| | | | | | |
|----------------------|------|--------|-----------|------------|------|
| TTCCAAAGGCTGCACCTTGC | Chip | 6400 | 19.06905 | 0 | 4207 |
| TCCTCAGCTTGGCCACGGAG | TT | 6478.5 | 5.8972673 | 17.989834 | 359 |
| GTCCACAGCTCTGAGGTCT | CCC | 6493 | 5.3572183 | 1.3877324 | 3277 |
| ACAACTCCTCTGGTCCTGG | Chip | 6494 | 5.7869687 | 2.3521452 | 2264 |
| TTCCTGGTCAGTGCTGTTCC | CT | 6518.5 | 5.1799512 | 10.527549 | 8079 |
| TTCCTGCGCCCTCTCGCCC | GC | 6532 | 19.192228 | 0 | 939 |
| AACATAGCCAGAATGTCTC | CTG | 6354 | 5.3396487 | 9.7120275 | 6168 |
| GGCTGGGCCTCTCCCTCAG | CTG | 6453 | 5.1583419 | 16.296978 | 3347 |
| GCCCTTGGCCTTTGGCCC | GG | 6460 | 7.9045153 | 0 | 3524 |
| TATCGAGCTGGACGGGCTGG | T | 6607 | 5.2088056 | 6.9531446 | 1239 |
| ACTGTACTCCAACCTGGGCA | AC | 6841 | 5.909749 | 20.226805 | 7945 |
| TGGTGCTTGTGGAGCTGGT | GCT | 6931 | 50.206551 | 0 | 7017 |
| CACTGCACCCCTAAACTCCT | GG | 6945.5 | 9.7742167 | 1.1890075 | 4962 |
| TCTGGCTTCCCTCTGTTCT | GGG | 6739 | 9.2949047 | 0.96471214 | 1186 |
| TGAGGCGTCTCCCTGAGCTC | AC | 6785 | 5.4904022 | 19.207653 | 4485 |
| TGTCTCCCCACTGGTCTTCC | AG | 7039 | 5.6089306 | 15.167439 | 135 |
| AACCCGTGATCCTGACTCCC | CT | 7080 | 5.843668 | 7.8386455 | 3924 |
| TCCTGGTCTTCAGGTTGCA | AAA | 7121 | 5.3691082 | 9.0031843 | 5680 |
| GCCTCATTTCACCTCCCC | Chip | 7161.5 | 21.520433 | 0.16928124 | 570 |
| CAGGGATGGCGCTGGCTGCC | CG | 7317 | 5.4272056 | 19.166769 | 7605 |
| CCTGGCTCTGCCACTTACTG | CC | 7371 | 5.4429383 | 8.8807936 | 8026 |
| GGCTGGACGATCTCCCTTC | CT | 7418 | 5.5213137 | 0.60796887 | 2578 |
| AAACTGCTTCCTTGGC | CT | 7436 | 5.6282043 | 5.6413546 | 42 |
| TAGCAGTGTCTAGGTAGGCC | AT | 7447 | 28.000751 | 1.1526781 | 3519 |
| GTCTCCCAGCCTACATCTT | CT | 7497 | 9.493165 | 0 | 888 |
| CACTGCAAGCAAGCTCCGC | CTC | 7633 | 15.721508 | 0.38197863 | 3124 |
| TGTGGCTCAGGCGGCTTCTC | CT | 7641 | 5.5752053 | 5.2592807 | 1607 |
| AGCAACTCTCACCTGGCTG | C | 7806.5 | 5.9086308 | 13.562915 | 7401 |
| CCTGCCTCCCCATCAGTTA | TACA | 7820.5 | 15.964743 | 1.1131122 | 741 |
| TTCAAAGGGAAAAGCAGG | CTGG | 7722 | 5.5424767 | 6.6963782 | 3559 |
| AGGTCTCTGCTGTCTGGC | CT | 8026.5 | 6.4343252 | 0.43719938 | 3380 |
| GCCGCGGCACTGGCTGGCT | CC | 8063 | 6.6011534 | 1.8802395 | 6018 |
| TCATTCCTCATTGTTCA | CTG | 8088 | 8.6392965 | 1.1877192 | 7459 |
| TGGCTTCTCACAGACCAC | CTC | 8109.5 | 17.646196 | 0 | 1795 |
| GGCCCCCGGAACGCTCTGT | GACC | 8124 | 21.336803 | 0 | 6563 |
| TCCAAATGAGCTGCCTTCA | CA | 8231 | 5.6790619 | 11.278896 | 2363 |
| CTCACCTCCAGGAGCTGCT | GGC | 8262.5 | 29.81432 | 0 | 7950 |
| GCCTCCTGGGTGCCATCAT | CT | 8207 | 15.521686 | 1.0917441 | 1587 |

| ROW# | DISEASE NAME | SEQ ID NOs OF GAMS ASSOCIATED WITH DISEASE |
|------|---------------------------------------|--|
| 2 | Multiple Sclerosis | 2, 5, 8, 10, 11, 13, 18, 21, 22, 25, 30, 31, 33, 34, 35, 36, 37, 38, 39, 43, 44, 46, 49, 50, 51, 52, 54, 55, 57, 59, 62, 64, 65, 67, 68, 69, 71, 73, 74, 78, 80, 81, 82, 93, 97, 99, 101, 102, 103, 106, 107, 108, 112, 118, 119, 120, 121, 122, 125, 126, 127, 128, 133, 138, 139, 140, 143, 144, 146, 147, 148, 149, 150, 151, 154, 155, 157, 164, 166, 171, 173, 175, 177, 179, 182, 183, 193, 195, 196, 197, 198, 202, 203, 204, 206, 209, 210, 212, 213, 214, 218, 222, 228, 229, 231, 232, 237, 239, 241, 242, 244, 248, 249, 251, 259, 260, 262, 264, 268, 271, 272, 279, 283, 284, 290, 291, 293, 296, 297, 299, 301, 305, 306, 308, 309, 311, 326, 328, 330, 334, 335, 337, 339, 340, 343, 345, 352, 353, 359, 360, 361, 362, 363, 367, 370, 371, 375, 380 and 9227360-9284478. |
| 3 | Alzheimer | 2, 4, 5, 7, 9, 10, 12, 13, 14, 15, 17, 18, 19, 21, 22, 23, 24, 25, 26, 31, 32, 33, 34, 35, 36, 37, 38, 39, 41, 44, 45, 46, 49, 50, 51, 52, 54, 55, 59, 60, 61, 62, 64, 65, 66, 67, 68, 69, 71, 72, 73, 74, 77, 80, 81, 82, 84, 86, 88, 92, 93, 94, 97, 98, 99, 100, 102, 104, 105, 106, 108, 109, 112, 115, 117, 118, 119, 120, 121, 123, 124, 125, 126, 130, 133, 135, 136, 137, 138, 140, 141, 144, 146, 147, 148, 149, 150, 151, 152, 154, 155, 156, 157, 158, 160, 162, 163, 166, 168, 169, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 193, 194, 195, 196, 198, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 216, 218, 221, 227, 228, 229, 230, 231, 232, 234, 235, 237, 239, 240, 241, 242, 243, 244, 245, 246, 248, 249, 251, 252, 254, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 270, 271, 272, 273, 274, 277, 279, 281, 283, 284, 285, 286, 288, 290, 291, 292, 293, 294, 296, 297, 298, 299, 301, 304, 305, 306, 307, 308, 309, 311, 314, 316, 317, 318, 319, 321, 322, 323, 325, 326, 327, 330, 334, 335, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 350, 351, 352, 353, 354, 355, 359, 360, 361, 362, 363, 364, 365, 367, 368, 370, 371, 372, 374, 375, 377, 379, 380 and 7079539-7236526. |
| 4 | Prostate cancer | 2, 3, 4, 5, 10, 13, 14, 16, 18, 19, 21, 22, 23, 24, 26, 27, 30, 32, 33, 34, 35, 38, 39, 41, 42, 44, 45, 46, 50, 52, 53, 54, 56, 57, 59, 60, 62, 64, 65, 66, 67, 68, 69, 71, 73, 74, 77, 78, 80, 82, 84, 88, 93, 94, 97, 99, 102, 103, 104, 105, 106, 108, 109, 111, 112, 114, 115, 116, 118, 119, 120, 121, 123, 125, 126, 128, 130, 133, 135, 136, 137, 139, 142, 143, 144, 146, 147, 148, 149, 150, 151, 152, 154, 155, 156, 159, 161, 165, 166, 168, 170, 171, 172, 173, 175, 177, 179, 180, 181, 183, 184, 185, 192, 194, 195, 196, 199, 201, 202, 203, 204, 207, 210, 212, 213, 214, 217, 218, 219, 220, 221, 228, 229, 230, 232, 234, 235, 237, 238, 240, 241, 243, 244, 246, 248, 249, 251, 252, 253, 255, 257, 258, 259, 260, 261, 262, 264, 266, 268, 269, 270, 271, 272, 273, 274, 278, 281, 283, 284, 285, 287, 288, 290, 293, 295, 296, 297, 299, 300, 301, 305, 306, 309, 311, 312, 314, 315, 316, 318, 319, 324, 326, 329, 334, 335, 337, 338, 339, 340, 343, 344, 345, 346, 348, 349, 351, 352, 353, 354, 355, 359, 360, 361, 362, 363, 364, 365, 367, 368, 370, 371, 372, 375, 376, 377, 379, 380 and 9650118-9780695. |
| 5 | Respiratory Syncytia Virus | 5, 33, 54, 69, 71, 99, 125, 150, 166, 175, 177, 179, 185, 195, 268, 283, 290, 299, 319, 362, 363 and 9841618-9846172. |
| 6 | Inflammatory Bowel Disease | 4, 24, 25, 39, 54, 69, 98, 99, 108, 133, 147, 166, 174, 213, 215, 223, 228, 248, 270, 283, 308, 326, 327, 339, 369, 370 and 8640213-8643616. |
| 7 | Chronic obstructive pulmonary disease | 68, 78, 105, 106, 149, 201, 230, 343, 371 and 7791250-7793042. |
| 8 | Myasthenia Gravis | 38, 54, 69, 77, 80, 112, 133, 144, 155, 166, 183, 228, 237, 262, 271, 326, 335, |

369, 378 and 9284479-9285935.

9 Nephrogenic diabetes 3, 47, 53, 54, 65, 67, 126, 147, 149, 179, 195, 245, 299 and 9324696-9325456.
insipidus

10 Carcinoid 54, 59, 68, 108, 166, 214, 218, 224, 248, 251, 265, 268, 271, 306, 339, 380 and
7743214-7747064.

11 Esophageal cancer 3, 4, 5, 10, 16, 18, 21, 22, 23, 24, 27, 33, 38, 41, 47, 54, 58, 59, 62, 63, 64,
65, 67, 68, 69, 70, 73, 80, 84, 93, 94, 99, 100, 102, 106, 107, 108, 112, 116,
118, 119, 120, 121, 122, 125, 126, 128, 130, 135, 136, 138, 147, 149, 150, 155,
160, 166, 171, 172, 173, 174, 179, 182, 183, 194, 195, 203, 207, 214, 217, 218,
225, 226, 229, 230, 232, 234, 238, 239, 241, 242, 248, 254, 255, 261, 262, 264,
266, 268, 271, 280, 284, 285, 290, 291, 293, 299, 304, 305, 309, 311, 312, 318,
319, 321, 326, 335, 338, 339, 340, 343, 344, 345, 352, 353, 356, 359, 361, 362,
363, 369, 370, 375, 377 and 8358228-8395973.

12 Polyposis 9, 12, 13, 23, 35, 42, 48, 73, 76, 81, 94, 106, 169, 175, 177, 193, 194, 223,
234, 237, 241, 259, 268, 285, 317, 319, 363, 371, 377 and 9635012-9640471.

13 Allergic contact der 5, 44, 205, 228, 299, 339, 365 and 7076523-7077157.
matitis

14 Myopathy 2, 5, 8, 18, 22, 24, 25, 32, 33, 35, 38, 50, 54, 59, 61, 62, 63, 68, 73, 74, 80,
85, 86, 91, 93, 98, 102, 104, 106, 108, 109, 112, 118, 119, 120, 121, 125, 128,
133, 136, 137, 139, 149, 151, 155, 164, 165, 166, 173, 174, 179, 183, 195, 202,
203, 205, 212, 214, 215, 217, 218, 229, 241, 248, 259, 260, 262, 266, 268, 269,
271, 284, 290, 291, 296, 299, 305, 318, 326, 334, 335, 337, 338, 339, 342, 345,
348, 350, 352, 353, 355, 359, 360, 361, 363, 364, 365, 372 and 9299853-9324695.

15 Otitis Media 54, 68, 78, 105, 106, 149, 201, 371 and 9563467-9564362.

16 Lung cancer 1, 2, 3, 4, 5, 7, 9, 10, 11, 12, 13, 14, 15, 18, 21, 22, 23, 24, 25, 26, 29, 30,
31, 32, 33, 34, 35, 36, 37, 38, 39, 41, 44, 45, 46, 49, 50, 51, 54, 55, 57, 58,
59, 60, 61, 62, 63, 65, 66, 67, 68, 69, 70, 71, 73, 74, 75, 76, 77, 78, 80, 81,
82, 84, 85, 86, 87, 88, 92, 93, 94, 97, 98, 99, 102, 104, 105, 106, 108, 112,
113, 115, 118, 119, 120, 121, 122, 123, 125, 126, 127, 128, 130, 131, 132, 133,
135, 136, 137, 138, 139, 144, 146, 147, 148, 149, 150, 151, 152, 154, 155, 157,
158, 159, 160, 162, 163, 164, 166, 168, 170, 171, 172, 173, 174, 176, 177, 178,
179, 180, 181, 182, 183, 184, 189, 193, 194, 195, 196, 197, 199, 201, 202, 203,
204, 205, 206, 209, 210, 212, 213, 214, 215, 217, 218, 221, 222, 224, 225, 228,
229, 230, 231, 232, 234, 235, 236, 237, 239, 240, 241, 242, 243, 244, 245, 246,
248, 251, 252, 255, 259, 260, 261, 262, 264, 265, 268, 269, 270, 271, 274, 275,
279, 283, 284, 285, 287, 288, 290, 291, 292, 293, 296, 297, 298, 299, 301, 304,
305, 306, 307, 308, 309, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321,
322, 323, 324, 326, 329, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 343,
344, 345, 346, 348, 349, 350, 351, 352, 353, 354, 355, 357, 359, 360, 361, 362,
363, 364, 365, 367, 368, 369, 370, 371, 373, 375, 376, 380 and 8843701-9042597.

18 Enterovirus 119 and 8331483-8333480.

19 Stroke 40, 143, 230, 370 and 10022877-10023366.

20 Hodgkin Disease 3, 13, 21, 22, 38, 41, 50, 53, 54, 61, 68, 69, 80, 94, 97, 99, 120, 121, 126,
147, 173, 184, 230, 232, 257, 268, 271, 278, 284, 305, 306, 333, 335, 336, 352,
353, 361, 362 and 8574406-8580874.

21 Amyloidosis 10, 21, 22, 38, 50, 54, 62, 78, 102, 106, 112, 118, 119, 120, 121, 146, 166,
173, 194, 251, 262, 268, 271, 283, 308, 352, 353, 370 and 7236527-7240440.

22 Depressive Disorder 7, 10, 22, 26, 41, 42, 68, 69, 71, 73, 81, 82, 99, 106, 109, 117, 118, 119, 120,
121, 126, 133, 149, 155, 169, 171, 180, 195, 214, 216, 218, 228, 230, 234, 251,
259, 260, 262, 263, 264, 268, 271, 273, 277, 283, 293, 299, 307, 309, 314, 317,

326, 339, 340, 341, 342, 343, 352, 353, 367, 379 and 8126668-8136267.

23 Clostridium 44, 283, 316, 363, 364 and 7809797-7810058.

24 HIV 2, 5, 7, 9, 10, 13, 18, 21, 22, 23, 24, 25, 26, 30, 31, 32, 33, 35, 38, 39, 42, 43, 44, 45, 47, 50, 51, 52, 53, 54, 55, 57, 61, 62, 64, 65, 67, 68, 69, 71, 73, 74, 80, 81, 82, 84, 85, 92, 93, 94, 97, 99, 102, 106, 107, 108, 109, 112, 115, 116, 118, 119, 120, 121, 122, 124, 125, 126, 127, 128, 130, 131, 133, 137, 138, 139, 144, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 159, 160, 165, 166, 168, 173, 174, 175, 177, 178, 179, 182, 185, 193, 194, 195, 196, 197, 198, 201, 202, 203, 210, 212, 213, 214, 215, 218, 222, 228, 229, 230, 231, 232, 233, 234, 237, 238, 239, 240, 241, 242, 246, 248, 249, 251, 252, 259, 260, 262, 264, 268, 269, 271, 272, 278, 279, 283, 284, 290, 291, 293, 296, 298, 299, 301, 305, 306, 308, 309, 311, 316, 317, 318, 323, 326, 329, 334, 335, 336, 337, 338, 339, 340, 341, 344, 345, 346, 352, 353, 354, 356, 359, 360, 361, 362, 363, 365, 367, 370, 371, 372, 375, 377, 380 and 8475487-8574405.

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